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AAD60939
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 treatment with respect to stenosis of a coronary artery or bypass graft
                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                     ss; primer; cytostatic; antidiabetic; anorectic; cerebroprotective; neuroprotective; antiinflammatory; gene therapy; antisense therapy; thyromimetic; NOVX; pathology; cancer; diabetes; obesity; endocrine disorder; CNS disorder; inflammatory disorder; chromosome mapping; tissue typing; predictive medicine.
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                                                                    1.0%; Score 16.6; DB 1; Length 24; 82.6%; Pred. No. 3.8e+02; ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                     Human NOVX polypeptide gene reverse primer SEQ ID NO: 537.
                                    Sequence 24 BP; 3 A; 6 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                              848 ACCTGGACAAGGACCTGAAGCAG 870
                                                                                                                                                                             ACCTGGACAAGAGTCTAAAGCAG 1
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2001US-0341562P.
2002US-0358656P.
2002US-0359122P.
2002US-0358978P.
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2001US-0299133P.
2001US-0299230P.
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2001US-0300177P.
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2001US-0324669P.
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2001US-0298285P.
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                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                           Local Similarity 82.6
nes 19; Conservative
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14-DEC-2001;
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22-FEB-2002;
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                                                                          Query Match
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                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated NOVX polypeptides and nucleic acid molecules useful for treating, preventing and diagnosing pathological conditions with NOVX-associated disorders, such as cancer, obesity, diabetes and inflammatory or CNS diseases.
                                                                                                                                          Kekuda R;
                                                               Agee ML, Anderson DW, Berghs C, Casman SJ, Catterton E;
Dipippo VA, Edinger SR, Eisen A, Ellerman K, Gangolli EA;
Gerlach VL, Gorman L, Guo X, Herrmann U, Hjalt T, Ji W, Kekuda R
Khramtsov NV, Li L, Liu X, Malyankar UM, Miller CE, Millet I;
Ort T, Padigaru M, Patturajan M, Pena CEA, Rastelli L, Rieger DK;
Rothenberg ME, Shenoy SG, Shimkets RA, Smithson G, Spaderna SK;
Spytek KA, Stone DJ, Vernet CAM, Zhong H, Zhong M, Alsobrook JP;
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autoimmune disease; neurological disorder.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example B; SEQ ID NO 537; 772pp; English.
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17-AUG-1999; 99US-00375926.
31-JUL-2000; 2000US-00629609.
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(atches 19; Conservative
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(KYAW/) KYAW H.
(BONI/) BONINI J A.
(CURA-) CURAGEN CORP.
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The present sequence is that of primer EV976, which was used with primer EV1333 (see ACF05114) in the PCR amplification of a 171 bp fragment corresponding to the 3' end of the long terminal repeats (LTR) of retrovarial vector pEV731. The amplified fragment was used as a probe for genomic DNA extracted from Jurkat cells infected with viral particles containing the HIV-derived vector LTR-Tat-IRES-GFP. The invention provides isolated cells that harbour a latent immunodeficiency virus that is transcription competent, that can be reactivated, and that is an in viro model for latent HIV infection in vivo. The cells are useful for investigating the nature of latency, and also in drug screening assays to identify agents that activate latent HIV. Such agents are useful for reducing the reservoir of latent HIV
immunodeficiency virus e.g. HIV-1, or immunodeficiency virus-based retroviral vector integrated into its genome, useful for identifying latent HIV activators.
                                                                                                                 Example 1; Page 32; 71pp; English
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Sequence 23 BP; 8 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

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1.0%; Score 16.6; DB 1; Length 23; 32.6%; Pred. No. 3.6e+02; ve 0; Mismatches 4; Indels
                                                                 1051 GCCAAGTCAATCCCAACAAGAC 1073
                   82.68;
                                    Conservative
               Local Similarity
es 19; Conserv
Query Match
                                  Matches
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GCTAATTCACTCCCAACGAGAC 23

AAA07024 standard; DNA; 24 BP 03-JUL-2000 AAA07024; RESULT 158 AAA07024

KSR; kinase supressor of ras; CAP kinase; phosphorylation; ceramide-activated protein kinase; lipopolysaccharide; LPS; endotoxin; sphingomyelin signal transduction pathway; mutagenic; PCR primer; ss. KSR PCR primer, SEQ ID NO:21.

(first entry)

Mus sp.

US6040149-A.

21-MAR-2000.

97US-00785247. 10-JAN-1997; 96US-0009900P. 11-JAN-1996;

(SLOK) SLOAN KETTERING INST CANCER RES.

Zhang Y, Liu J, Kolesnick RN;

WPI; 2000-270133/23.

lipopolysaccharide induced threonine phosphorylation by a ceramide-activated protein kinase. Novel method of identifying agents capable of inhibiting

Example VII; Col 57; 84pp; English.

The invention relates to a novel method of determining whether an agent is capable of specifically inhibiting the ability of a ceramide-activated protein (CAP) kinase to phosphorylate the threonine residue in a polypeptide containing a Thr-Pro- or Thr-Leu-Pro motif. In particular, the peptide substrate that is specifically phosphorylated is Raf-1, epidermal growth factor receptor (BGFR), or suitable fragments thereof. The CAP kinase is membrane bound and has an apparent molecular weight of

transduction pathway which uses ceramide as a second messenger. This pathway is initiated by tumour necrosis factor-alpha (TNF-alpha) and interior pathway is initiated by tumour necrosis factor-alpha (TNF-alpha) and ceramide. The ceramide in turn stimulates the kinase to phosphorylate protein substrates which can then mediate signal transduction. The CAP kinase is also stimulated by the bacterial endotoxin lippoolysaccharide (LPS), which is thought to mimic the second messenger function of ceramide. The methods are useful for identifying agents that inhibit impoolysaccharide-induced Thr phosphorylation by CAP kinase. The agents identified using the method are useful for treating disorders associated with aberrant phosphorylation of target molecules by CAP kinase, e.g., inflammatory disorders (such as rheumatoid arthritis), ulcerative colitis, graft versus host disease, lupus erythematosus, HIV, infection, disorders associated with poor stem cell growth, and septic shock. the present invention to generate mutant Flag peptide/murine KSR (kinase supressor of ras) sequences via overlap extension PCR. KSR is a homologue 100-110 kD. It is an upstream participant in a sphingomyelin signal kinase

Sequence 24 BP; 6 A; 8 C; 7 G; 3 T; 0 U; 0 Other;

Gaps .. 1.0%; Score 16.6; DB 1; Length 24; 82.6%; Pred. No. 3.8e+02; 4; Indels 0; Mismatches 19; Conservative Local Similarity Query Match **datches**

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1619 CAGACCGAGGCCCCAGCAGCAG 1641 24 CAGATCAAGGCCTCAGCAGGCTG N

ð g

ö

Gaps

AAF64165 standard; DNA; 24 AAF64165/

(first entry) 06-APR-2001 AAF64165;

Primer #105

Human; lipoprotein lipase; LPL; stenosis; ss.

Homo sapiens,

WO200102606-A2.

11-JAN-2001.

30-JUN-2000; 2000WO-US018308

99US-00347114. 02-JUL-1999; Yang H; Rotter J, Schenner M, Taylor KD,

(CEDA-) CEDARS SINAI MEDICAL CENT.

WPI; 2001-138155/14.

Genetic testing for determining non-responsiveness to statin drug in patients of a coronary artery disease, involves analyzing amplification products for homozygosity for a variant allele in the human lipoprotein lipase gene.

Example 5; Page 26; 74pp; English.

The present invention relates to detecting a genetic predisposition in a human subject for non-responsiveness to statin drug treatment, involving amplifying nucleic acids including a non-coding or untranslated region within the 3' end of the human lipoprotein lipase (LPL) gene from a tissue sample. The method is useful for determining which patients suffering from coronary artery disease, or which coronary artery bypass graft (CABG) patients, will likely not respond positively to statin drug

Human hGT1 PCR primer 1.

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This invention describes novel human GTI (hGTI) transcription factor gene with neuroleptic activity containing a transcribed polymorphic CAG schedar. Allelic variants of the hGTI gene CAG repeat are associated with schizophrenia, affective disorders (especially manic depression), neurodevelopmental brain diseases or with phenotypic variability with espect to long term response to neuroleptic medication. Short (171-177 bp) allelic variants of CAG repeats in the hGTI gene, are indicative of non-severe schizophrenia and neuroleptic response in patients. Probes and/or primers designed using the hGTI gene can be used to identify genes interacting with a bicchemical pathway affected by the hGTI gene. The identified gene role can then be evaluated in psychiatric patients. The transgenic mammal (or schizophrenic patients) and evaluating the prevention and/or treatment of development of schizophrenia
                          Polymorphic CAG repeat; hGT1; diagnosis; prognosis; schizophrenia; human; transcription factor; neuroleptic activity; affective disorder; manic depression; neurodevelopmental brain disease; detection; phenotypic variability; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                               A human GT1 gene containing a transcribed polymorphic CAG repeat, useful in the diagnosis and treatment of schizophrenia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAP-kinase-kinase; LMMKK; diagnosis; treatment; leishmaniasis; disease; parasite; protozoal infection; vaccine; PCR primer; ss.
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                                                                                                                                                                                                                                98WO-CA000884.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA98718 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                  Joober R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Leishmania mexicana.
                                                                                                                                                                                                                                                                                                 (UYMC-) UNIV MCGILL.
                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-254703/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
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                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                18-SEP-1998;
                                                                                                                                                                                                                                                                  .9-SEP-1997;
                                                                                                                                                                W09915639-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-FEB-2001
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                                                                                                                                                                                                                                                                                                                                  Rouleau GA,
                                                                                                                                                                                               01-APR-1999
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                                                                                                               Synthetic
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Gaps

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This invention describes a novel use of nucleic acid (I) that encodes Leishmania kinases (II) for identification and preparation of agents for diagnosis, treatment and/or prevention of leishmaniasis. The invention also describes (a) use of (II) for identifying and producing agents for diagnosis, treatment and/or prevention of leishmaniasis, (b) antibodies (Ab) directed against (II); and (c) Leishmania mutants in which as least one gene (I) is inactivated. (II) are essential for differentiation and replication of the parasites, so are targets for development of specific inhibitors. Mutants defective in (II) induce an immune response but do not cause disease. (I) and (II) are useful for identifying and preparing agents for diagnosis, treatment and/or prevention of protocoal infections, particularly leishmaniasis. (I). (II) and (II)-specific antibodies may themselves be used for diagnosis and treatment. Leishmania mutants that are unable to express at least one (II) are useful as live
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vector; pEV731; immunodeficiency virus; HIV; anti-HIV; latency; PCR;
                                                                                                                                                                          Use of nucleic acid encoding Leishmania kinases for identifying and preparing diagnostic, preventative and therapeutic agents.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.0%; Score 16.6; DB 1; Length 23; 82.6%; Pred. No. 3.6e+02; ative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 23 BP; 7 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
                                                                           (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Retroviral vector pEV731 PCR primer EV976.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    994 AACCIGCICAICAACGAGGGG 1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AACCTGCTCATCAGCGAAACTGG 23
                                                                                                                                                                                                                             Example 1.7; Page 69; 98pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .9-DEC-2001; 2001US-0341727P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-DEC-2002; 2002WO-US040698
             99DE-01039070
                                               99DE-01013905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACF05113 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 82.6
Matches 19; Conservative
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                                                                                                                                               WPI; 2000-619872/60.
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             18-AUG-1999;
                                               26-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACF05113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      vaccines
                                                                                                               Wiese M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 157
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Novel isolated cells that comprise transcription competent

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BP.

(first entry)

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Vector; pVAC1; pRc/RSV; leader sequence; termination signal; PCR; fusion protein; pSfi/Not.Tag1; pelB leader; human; immunoglobulin; VH1; single chain; FV; murine antibody; retroviral; envelope; amplify; plasmid; vaccine; polymerae chain reaction; ss.
                                                                                                                                         Vector pVAC1 construction primer #8.
                                            AAQ62402 standard; DNA; 23
                                                                                                                                                                                                                                                               WO9408008-A1
                                                                                                                                                                                                                                                                                                                    04-OCT-1993;
                                                                                                                                                                                                                                                                                         14-APR-1994.
                                                                                                   25-MAR-2003
                                                                                                                18-NOV-1994
                                                                                                                                                                                                                                    Synthetic.
                                                                        AAQ62402;
                     RESULT 154
                              AAQ62402
ID AAO6
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useful for organ transplantation studies, lot the study of disease disease and for the determination of susceptibility to infectious disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence is a sequencing primer for Human Leukocyte Antigen (HLA) class I gene. The HLA class I genes are found on chromosome 6p21.3. HLA class I proteins are found on the surface of almost all nucleated cells and are involved in antigen presentation to immune system cells. This primer can be used to type HLA class I genes: by carrying out PCR on a sample DNA, comprising HLA class I gene, and detecting the amplicon formed using a sequence. The present sequence is useful for discriminating among the HLA-B, and HLA-B, and HLA-C genes and other related class I genes and pseudogenes. In addition, the present sequence is useful for organ transplantation studies, for the study of autoimmune disease and for the determination of susceptibility to infectious disease
                                                                                                                                                                                                                                                                                                                         Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing; organ transplantation; autoimmune disease; sequencing primer; infectious disease susceptibility; chromosome 6p21.3; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Typing HLA class I genes for organ transplantation, involves contacting the sample DNA containing HLA class I gene comprising two exons and a target sequence, with amplification primers and detecting the amplicon.
                                                                                                  Gaps
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0
                                                                   Query Match 1.0%; Score 16.8; DB 1; Length 21; Best Local Similarity 90.0%; Pred. No. 3.1e+02; Matches 18; Conservative 0; Mismatches 2; Indels
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                                     Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chadwick RB;
                                                                                                                                                                                                                                                                                                HLA class I gene sequencing primer #9.
                                                                                                                        352 GGGTCTGATGGGGAGAGTGA 371
                                                                                                                                             21 GGGTCTGATGGGAAGAGTCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 10; Col 35; 60pp; English.
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                                                                                                                                                                                                                   AAA90559 standard; DNA; 21
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                                                                                                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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                                                                                                                                                                                                                                                                       11-JAN-2001
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AAA90559/c
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93WO-GB002054.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              leader sequence. This plasmid when encoding a single chain murine antibody/retroviral envelope fusion protein can be used as a plasmid vaccine and it induces a strong humoral response to the antibody moiety in BALB/c mice. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                Modulating immune response to a disease marker - by administering a vector which expresses the disease marker to interact with the immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                     Winter GP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 23 BP; 5 A; 4 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                              Hawkins RE, Russell SJ, Stevenson FK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1269 TGAGGAGACGTGGCCAGGCATCC 1291
                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 33; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92GB-00020808.
                                                             (MEDI-) MEDICAL RES COUNCIL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX23985 standard; DNA; 23
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Best Local Similarity 82.6
Matches 19; Conservative
                                                                                                                                                                                                   WPI; 1994-135575/16.
02-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX23985;
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AAX23985
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Gaps

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GGGTCTGATGGGGAGAGTGA 371

352

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GGGTCTGATGGGAAGAGTCA 2

10017621-381.rng

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96WO-US002408
                                                                                                                                     AAT95004 standard; DNA; 21
                                                                                                                                                  (first entry)
                                                                                                                                                                                                                      WPI; 1997-435175/40.
                                                                                                     Local Similarity
es 18; Conserv
                                                                                                                                                                                                    20-FEB-1996;
                                                                                                                                                                           Homo sapiens
  20-FEB-1996;
         20-FEB-1996;
                                                                                                                                                                                 WO9731126-A1
                                                                                                                                                  02-APR-1998
                                                                                                                                                                                       28-AUG-1997
                                                                                                                                                                        Synthetic
                                                                                                                                            AAT95004;
                                                                                                   Query Match
                                                                                                                               RESULT 151
                                                                                                         Matches
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Sequencing primers AAT94987-92 were used to sequence PCR amplified human leukocyte antigen (HLA) class I genes. The primers are designed to hybridise to exon-intron borders of exons 2, 3 and 4 of the HLA genes. PCR primers were used for locus specific nucleic acid amplification for HLA typing. Typing HLA-A, -B or -C class I genes comprises providing a sample DNA containing a HLA-A, -B or -C class I gene having a 1st and 2nd exon and a target sequence, contacting the sample DNA with an amplification primer including sequence complementary to sequence located in exon 1 of the HLA-A, -B or -C gene, and a second amplification primer sequence complementary to sequence located in exon 5 of the HLA-A, -B or -C gene, and a second amplification primer equence complementary to sequence located in exon 5 of the HLA-A, -B or -C gene. The PCR product is sequenced using the above primers and the determined DNA sequence compared with the DNA sequences of known HLA Amplification and sequencing primers specific for HLA class 1 genes useful for locus specific nucleic acid amplification for HLA typing Seguence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other; Parham Claim 10; Page 57; 105pp; English. Johnston-Dow L, Chadwick RB, 96WO-US002408 96WO-US002408 (PEKE) PERKIN-ELMER CORP WPI; 1997-435175/40.

Gaps ö 1.0%; Score 16.8; DB 1; Length 21; ilarity 90.0%; Pred. No. 3.1e+02; Conservative 0; Mismatches 2; Indels 352 GGGTCTGATGGGGAGAGTGA 371 21 GGGTCTGATGGGAAGAGTCA 2

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Primer for sequencing exon 4 antisense strand of HLA class I genes. Human leukocyte antigen-C class I gene; HLA-C; exon 1; exon 5; locus specific nucleic acid amplification; HLA typing; exon 4; ss.

(PEKE) PERKIN-ELMER CORP

Parham P; Johnston-Dow L, Chadwick RB,

The present sequence is a sequencing primer for Human Leukocyte Antigen (HLA) class I gene. The HLA class I genes are found on chromosome 6p21.3. HLA class I proteins are found on the surface of almost all nucleated cells and are involved in antigen presentation to immune system celled. This primer can be used to type HLA class I genes: by carrying out PCR on a sample DNA, comprising HLA class I gene, and detecting the amplicon formed using a sequence-specific detection method e.g. DNA sequencing (using the present sequence). The present sequence is useful for discriminating among the HLA-A, HLA-B, and HLA-C genes and other related class I genes and pseudogenes. In addition, the present sequence is

Claim 39, Col 38; 60pp; English.

Amplification and sequencing primers specific for HLA class 1 genes useful for locus specific nucleic acid amplification for HLA typing.

ö The present sequencing primer was used to sequence PCR amplified human leukocyte antigen (HLA) class I genes. The primer is designed to sequence the antisense strand of exan 4, from the 5, exon-intron border. PCR primers were used for locus specific nucleic acid amplification for HLA typing. Typing HLA-A, -B or -C class I genes comprises providing a sample DNA containing a HLA-A, -B or -C class I gene saving a 1st and 2nd exon and a target sequence, contacting the sample DNA with an amplification primer including sequence complementary to sequence located in exon I of the HLA-A, -B or -C gene, and a second amplification primer sequence complementary to sequence located in exon I of the HLA-A, -B or -C gene, and a second amplification primer sequence The PCR product is sequenced using the above primers and the determined DNA sequence compared with the DNA sequences of known HLA types Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing; organ transplantation; autoimmune disease; sequencing primer; infectious disease susceptibility; chromosome 6p21.3; ss. Typing HIA class I genes for organ transplantation, involves contacting the sample DNA containing HIA class I gene comprising two exons and a target sequence, with amplification primers and detecting the amplicon. Gaps .. 0 Query Match
Best Local Similarity 90.0%; Pred. No. 3.1e+02;
Matches 18; Conservative 0; Mismatches 2; Indels Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other; Chadwick RB; HLA class I gene sequencing primer #3. Claim 29; Page 62; 105pp; English. 352 GGGTCTGATGGGGAGAGTGA 371 21 GGGTCTGATGGGAAGAGTCA 2 AAA90553 standard; DNA; 21 BP 95US-00538666 95US-00390251. Johnston-Dow L, 11-JAN-2001 (first entry) (PEKE) PERKIN-ELMER CORP. WPI; 2000-542544/49. 03-OCT-1995; 14-FEB-1995; Homo sapiens US6103465-A. 15-AUG-2000. Parham P, AAA90553; AAA90553 95

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The invention describes a new compound, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding CDK9, specifically hybridises with the nucleic acid encoding CDK9 comprising 7018-bp sequence and inhibits expression of CDK9. Also described are: inhibiting the expression of CDK9 in cells or tissues; screening for a modulator of CDK9; a diagnostic method for identifying a disease state; a kit or assay device comprising the compound; and treating an animal having a disease or condition associated with CDK9. The oligonucleotide compound is useful for preparing a composition for treating hyperproliferative disorder, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New oligonucleotide compound that inhibits expression of CDK9, useful for preparing a composition for treating hyperproliferative disorder, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This sequence represents a human cyclin-dependent kinase 9 (CDK9)
       'note= "OTHER= Phosphorothioate backbone. All cytidines
                                                                                                                                                                                                                              /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                          note= "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human leukocyte antigen-C class I gene; HLA-C; exon 1; exon 5; locus specific nucleic acid amplification; HLA typing; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.0%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.9e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;
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                                 are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1030 GCTGACTTTGGCCTGGCCCG 1049
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                                                                                                      mod_base= OTHER
                                                                                                                                                                                                       /mod_base= OTHER
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                                                                               *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-440329/41.
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Best Local Similarity
Matches 18; Conserv
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                                                        modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a compound targetted to a nucleic acid molecule encoding haematopoietic cell protein tyrosine kinase. The compound inhibits the expression of haematopoietic cell protein tyrosine kinase and it specifically hybridises with the nucleic acid molecule encoding the tyrosine kinase or with at least an 8-nucleobase portion of an active site on the nucleic acid molecule encoding the tyrosine kinase. The attiense compounds are useful for modulating the expression of haematopoietic cell protein tyrosine kinase and treating diseases or conditions associated with the expression of the tyrosine kinase, such as hyperproliferative disorders (e.g. cancer), inflammation, diabetes or a viral infection. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay infection, inflammation or tumour formation, as research reagents and kits and in distinguishing between functions of various members of a biological pathway. The present sequence is human haematopoietic cell tyrosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; gene therapy; CDK9; cyclin dependent kinase 9; CDK9 associated disorder; hyperproliferative disorder; cancer; human; antisense oligonucleotide; antisense technology; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides targeted to nucleic acids encoding hematopoietic cell protein tyrosine kinase, useful for diagnosing or treating cancer (e.g. leukemia), inflammation, diabetes or viral
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                      /mod_base= OTHER
/note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.0%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.9e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; Page 26; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
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     /*tag= c
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                                                                                                                                                                                                                                                                                                                                              Borchers AH, Dobie KW;
                                                                                                                                                                                                                                                                                                PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-811000/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                 US2003125275-A1
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modified_base
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The sequence represents a human mammary gland enriched chemokine (WEC) sense primer. The primer was used in the invention to generate a fragment encompassing the entire coding region of MEC. The invention relates to a novel method for regulating a tumour or adverse bodily reaction, comprising providing a therapeutic composition having a mammary gland chemokine polypeptide. The polypeptide of the invention has cytostatic and antiinflammatory activity. The method of the invention is useful for regulating a tumour or adverse bodily reaction. The invention also provides a method useful for detecting a tumour using a probe comprising the polymuleotide or an antibody to the MEC. The adverse bodily
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety; Parkinson's disease; Huntington's disease; neurological disorder; schizophrenia; manic depression; mental retardation; angina pectoris; cardiovascular disease; acute heart failure; myocardial infarction; muscular disease; muscular disorder; retinal disease; photoreception; deafness; keratinisation disorder; cancer; ovarian cancer; melanoma; immunological disorder; inflammatory disease; immune disease; diabetes; bacterial infection; fungal infection; protozoal infection; obesity; viral infection; reproductive system disorder; metabolic disturbance; anorexia; wasting disorder; chronic disease; infectious disease; dyslipidaemia; probe; ss.
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Ellerman K, Gerlach V, Gorman L, Grosse WM;
kuda R, Lepley DM, Li L, Macdougall JR;
Mann JA, Rastelli L, Rieger DK, Shimkets RA;
Stone DJ, Tchernev VT, Vernet CAM, Voss EZ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 26 BP; 4 A; 6 C; 10 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       reactions include cancer and inflammation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    941 GCCTGGCCTACTGCCACCGGCAGAA 965
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Disclosure; Page 5; 11pp; English.
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2001US-0291037P.
2001US-0297173P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABS64424 standard; DNA; 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-NOV-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human NOVX probe Ag2492.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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15-MAY-2001;
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Best Local S
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ABS64424
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The present invention relates to new NoVX polypeptides. The polypeptides, compounded and antibodies are useful in the manufacture of a polymucleotides and antibodies are useful in the manufacture of a medicament for treating or preventing neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease, or Huntington's diseases (e.g. Alzheimer's diseases, Parkinson's disease (e.g. acute heart failure, neurological disorders (ardiovascular disease (e.g. acute heart failure, angina pectoris or myocardial infarction), muscular diseases and diseases (including those involving photoreception, deafness and keratinisation disorders), cancer (e.g. ovarian cancer or melanoma), immunological disorders, inflammatory and immune diseases, bacterial, fungal, protozal and viral infections, and reproductive system disorders. The proteins of the invention may be used to screen drugs or compounds that modulate the NOVX protein activity or expression, as well as to treat disorders characterised by insufficient or excessive production of NOVX protein or protein forms that have decreased or aberrant activity compared to NOVX wild type protein, such as diabetes, obseity, metabolic disturbances associated with obseity, anorexia and wasting disorders associated with chronic diseases and various dyslipidaemias. The nucleic acid infectious diseases and various dyslipidaemias. The nucleic acid corrected form minute biological samples (tissue typing), and in formation of mainty appears associated with present mucleic acid sequence represents a probe that was used in the methods of the invention of sequence represents a probe that was used in the methods of the invention of the in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Haematopoietic cell; tyrosine kinase; hyperproliferative disorder; cancer; therapy; inflammation; diabetes; viral infection; inflammation; tumour; cytostatic; virucide; antisense therapy; antisense; human; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 //note= "Phosphorothioate backbone; All cytidines are 5-
methyl cytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human haematopoietic cell tyrosine kinase antisense oligo ISIS #150763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
          New NOVX polypeptides and polynucleotides useful for treating or preventing e.g. neurodegenerative diseases, neurological disorders, cardiovascular diseases and disorders, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
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                                                                                                                                         Example 2; Page 247; 299pp; English.
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/mod_base= OTHER
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Best Local Similarity 80.0°
Matches 20; Conservative
                                                                                             immunological diseases.
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/mod_base= OTHER /note= "2'-0-methoxyethyl (2'-MOE) nucleotides" 16. .20

*tag= b

modified base

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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in analysis of genetic variation or in hybridisation to a DNA library, compounds. The nucleic acid probes are specifically designed for analysis compunds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid states and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dottor hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' terminin of mRNA molecules by primer extensions or in screening segments of DNA that have been solutioned and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence and previously sequenced. The sequence containing segments of DNA that have been subclones to this patent can also be obtained in electronic format directly from USPTO at sequence. Then
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                               New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ss; PCR; primer; beta-B1-crystallin; beta-crystalline; golden hamster; splicing abnormality; miscarriage; eye ball abnormality;
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ive 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 25 BP; 7 A; 11 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Golden hamster beta-B1-crystallin PCR primer #6.
                                                                                                                                                                                                                                                                                                                                           sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 128708; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                232 GGTGGTGGTGGCGGCAGTGACCCTG 256
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                                                                                 15-MAR-2002; 2002US-00098263.
                                                                                                                          16-MAR-2001; 2001US-0276759P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 80.0
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hereditary myocardosis.
                                                                                                                                                                    (AFFY-) AFFYMETRIX INC
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                                                                                                                                                                                                                                                     WPI; 2003-567953/53.
US2003104410-A1.
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                                                                                                                                                                                                              Mittmann MP;
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                                       05-JUN-2003
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New (beta)-crystalline DNA of a normal golden hamster, useful for treating or preventing various diseases resulting from the abnormality of splicing (e.g., miscarriage).
                                                                                                                                                                                                                                                      The invention relates to a DNA encoding beta-crystalline of a normal golden hamster. The DNA is useful for treating or preventing various disease resulting from the abnormality of splicing (e.g., miscarriage), and to elucidate the cause of the abnormality in the eye ball BIO14.6 hamster which is a model animal of hereditary myocardosis. The DNA enables the elucidation of the cause of the abnormality in eye ball hamster, an molecular machinery related to splicing of the gene in generating mature mRNA. The present sequence represents a golden hamster beta-Bl-crystallin PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; MEC; mammary gland enriched chemokine; chemokine; tumour; cancer; cytostatic; antiinflammatory; inflammation; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Regulating tumor or adverse bodily reaction, involves providing therapeutic composition comprising a mammary gland chemokine, and providing the composition to the tumor or to the area of adverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.0%; Score 17; DB 1; Length 25;
80.0%; Pred. No. 3.38+02;
.ive 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human mammary gland enriched chemokine sense primer.
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 25 BP; 5 A; 7 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                              (DOKU-) DOKURITSU GYOSEI HOJIN KAGAKU GIJUTSU SH
                                                                                                                                                                                                                           Example 4; SEQ ID NO 17; 39pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       750 CCGGGAAGTGTCCCTGCTCAAGGAC 774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 CCTGGAAGTTTTCCTGCTCGAAGAC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bhatia U;
                               21-OCT-2002; 2002JP-00305562.
                                                              21-OCT-2002; 2002JP-00305562.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-MAR-2001; 2001US-00813492.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-MAR-2000; 2000US-0191654P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABA99030 standard; DNA; 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20; Conservative
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(MICK/) MICKANIN C S.
(BHAT/) BHATIA U.
                                                                                                                             WPI; 2004-360998/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-187776/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
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13-MAY-2004
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ABA99030/c
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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Confound the perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in analysis of genetic variation or in hybridisation to a DNA library, or proposed to genetic variation or in hybridisation to a DNA library, of at least one target sequence. The method of analysis comprises of at least one target sequence. The method of analysis comprises of hybridising at least one or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence or specific.

Content of any gene, in mapping the 5' termin of mRNA molecules by the mittens of any gene, in mapping the 5' termin of mRNA molecules by confinent any sequenced in the microarray. Note: The sequence of acid probes incorporated in the microarray. Note: The sequence of from inspired and previously sequenced in the microarray. Note: The sequence of from inspired the microarray. Note: The sequence of from inspired in the microarray. Note: The sequence of from inspired in the microarray. Note: The sequence of from inspired in the microarray. Note: The sequence of from inspired in the microarray. Note: The sequence of from inspired in the microarray. Note: The sequence of from inspired in the proposed in the microarray. Note: The sequence of from inspired in the microarray. Note: T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               from USPTO at segdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 48152; 9pp; English.
                                                                                                                                                                                                                                 15-MAR-2002; 2002US-00098263.
                                                                                                                                                                                                                                                                                               16-MAR-2001; 2001US-0276759P.
   cross-species comparison.
                                                                                                                                                                                                                                                                                                                                                       (AFFY-) AFFYMETRIX INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-567953/53
                                                                                                                  US2003104410-A1
                                                          Homo sapiens
                                                                                                                                                                             05-JUN-2003
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ö Gaps ; 1.0%; Score 17; DB 1; Length 25; 80.0%; Pred. No. 3.3e+02; Live 0; Mismatches 5; Indels 787 AACATCGTTACGCTACATGACATTA 811 20; Conservative Local Similarity Best Loca Matches

25 AATAACGTCACACTACAAGACATTA 1

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ACK02039 standard; DNA; 25 BP ACK02039; RESULT 143 ACK02039/c

Human microarray DNA oligonucleotide SEQ ID NO 102020.

(first entry)

14-0CT-2003

EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; cross-species comparison.

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in manitoring gene expression levels by hybridisation to a DNA library, compounds. The nucleic acid probes are specifically designed for analysis of at laast one target sequence. The method of analysis comprises of at least one or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, cor family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid forther comprises a tag sequence. The array of nucleic acid forther comprises a tag sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by the additional subclones containing segments of DNA that have been to risolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at sequence. html New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene. Gaps ; 0 1.0%; Score 17; DB 1; Length 25; 30.0%; Pred. No. 3.3e+02; ve 0; Mismatches 5; Indels Sequence 25 BP; 5 A; 9 C; 4 G; 7 T; 0 U; 0 Other; 80.0%; Pred. No. 3.3e ive 0; Mismatches Claim 1; SEQ ID NO 102020; 9pp; English. 391 TCGGATGAGGTGCAGTCTCCAGTGA 415 15-MAR-2002; 2002US-00098263. 16-MAR-2001; 2001US-0276759P Best Local Similarity 80.0 Matches 20, Conservative (AFFY-) AFFYMETRIX INC. WPI; 2003-567953/53. US2003104410-A1 Homo sapiens Mittmann MP; 05-JUN-2003 Query Match δ

25 raddargagargaaccrcaagaga 1 RESULT 144

ACK28727 standard; DNA; 25 BP

ACK28727

ACK28727;

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Human microarray DNA oligonucleotide SEQ ID NO 128708. 14-OCT-2003 (first entry)

EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; cross-species comparison.

Homo sapiens

10017621-381.rng

(first entry)

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Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ1; MDZ1; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                             Human MDZ7 scanning oligonucleotide SEQ ID 4800.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 8; SEQ ID NO 4800; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                30-JUL-2002; 2002EP-00016874.
                                                                                                                                                                                                                                                                                                                                                                                                                        02-AUG-2001; 2001US-00922181.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-423107/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                           EP1281758-A2.
                                                                                                                                                                                                                                                Homo sapiens
                                                 20-NOV-2003
                                                                                                                                                                                                                                                                                                                                    05-FEB-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shannon M,
      ADB03814;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is encoded at chromosome fg21.3-22.2, MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross alterations in MD23, MD27, or MD212. The probes are
                                                                                                                                                                                                                                                                                                         Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ1; chromosome 7g22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            present invention relates to novel human zinc finger-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1., ____Pred. No. 3.3e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 25 BP; 0 A; 11 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                  Human MDZ7 scanning oligonucleotide SEQ ID 4802.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 8; SEQ ID NO 4802; 103pp; English.
CTGTTCCCGCTGCCCTCGGGCTGG 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JUL-2002; 2002EP-00016874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-AUG-2001; 2001US-00922181
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                                                                                                                                   ADB03816 standard; DNA; 25
                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shannon M,
                                                                                                                                                                              ADB03816;
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Gu Y, Nguyen C;

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The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is encoded at chromosome 7q22.1, MD24 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 16p12 in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic anset on sections in MD23, MD23, MD212 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 25;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 17; DB 1; Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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Best Local Similarity
Matches 20; Conserv
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Gaps

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0; Mismatches

Local Similarity 80.0 nes 20; Conservative

923 TGTTCCAGCTGCTCGTGGCCTGGC 947

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ADB03814 standard; DNA; 25 BP.

RESULT 141 ADB03814 ID ADB0 XX 10017621-381.rng

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primers 236748-49 were used to amplify GenBank accession number represents a target for the method of the invention. The amplified sequence represents a target for the method of the invention. The specification describes a method for measuring the level of two or more nucleic acid molecules in a target. The method comprises contacting a probe with an arbitrarily or statistically sampled target and detecting the amount of specific binding of the target to the probe. The methods can be used to identify differentially expressed nucleic acid molecules associated with disease states, such as cancer, autoimmune disease, infectious disease, aging, developmental disorder, proliferative disorder or neurological disorder. Also the methods can be used to toxicity of or a resistance to a treatment. Also the methods can be used to determine differential expression of nucleic acid molecules in
conjunctival scarring) or a hyperproliferative disease or condition (e.g. cancer), or in inhibiting the growth of a tumour. This sequence represents a human JNK2 oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     response to a stimulus, e.g. a chemical, drug or growth factor (especially epidermal growth factor), radiation, stress or a pathogen. The methods can also be used to determine co-regulated genes that can be potential targets for drug discovery.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          growth factor; epidermal growth factor; radiation; stress; pathogen; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Measuring expression of low abundance reduced complexity target nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stimulus-regulated nucleic acid; sequence profile; nucleic acid level; differentially expressed nucleic acid; disease state; cancer; autoimmune disease; infectious diseases, aging; developmental disorder; proliferative disorder; neurological disorder; toxicity; PCR primer; treatment resistance; differential expression; drug discovery;
                                                                                                                                                             Gaps
                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR primer used to amplify GenBank accession number H27389.
                                                                                                                   1.0%; Score 17; DB 1; Length 20;
100.0%; Pred. No. 2.7e+02;
ive 0; Mismatches 0; Indels
                                                                               Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Welsh J, Trenkle T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 3; Page 96; 187pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CANCER CENT SIDNEY.
                                                                                                                                                                                                    1033 GACTITGGCCTGGCCCG 1049
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98US-0098070P.
99US-0118624P.
                                                                                                                                                                                                                            1 GACTTTGGCCTGGCCCG 17
                                                                                                                                                                                                                                                                                                                                             AAZ36748 standard; DNA; 25 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                       Query Match
Best Local Similarity 100.
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-086388/07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acid molecules.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-APR-1999;
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04-FEB-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                     AAZ36748;
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proteins and their coding sequences: MD23, MD24, MD212. MD23 is encoded at chromosome 7422.1, MD24 is encoded at chromosome 6p21.3-22.2, encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 16p11.2 and MD212 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD21, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross acids can also be used as probes to detect and characterize gross alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7g22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to novel human zinc finger-containing
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                                                       25;
                                                                                              Indels
                                                         Length
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                                    1.0%; Score 17; DB 1; Ler
80.0%; Pred. No. 3.38+02;
No. mismatches 5;
                 Sequence 25 BP; 5 A; 4 C; 7 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                             Human MDZ7 scanning oligonucleotide SEQ ID 4801.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 8; SEQ ID NO 4801; 103pp; English.
                                                                                                                                         531 CAATAGCCCCATCTTTGACAAGCCC 555
                                                                                                                                                                           25 cácradcagcarcrirgaaaagcac 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gu Y, Nguyen C;
                                                                                                                                                                                                                                                                                     ADB03815 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                Conservative
                                  Query Match
Best Local Similarity
Thes 20; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
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                                                                                                                                                                                                                                                                                                                               ADB03815;
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922 CTGTTCCAGCTGCTCCGTGGCCTGG 946

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1033 GACTTTGGCCTGGCCCG 1049

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New oligonucleotides, which specifically hybridizes with Jun N-terminal kinase protein, useful in diagnosing or treating inflammation, fibrosis or a fibrotic or hyperproliferative disease or condition.
                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an oligonucleotide comprising 8-30 nucleotides
                                               Human, Jun N-terminal kinase, JNK, Jun N-terminal kinase 2; JNK2; hyperproliferative disease; cell cycle progression; protein phosphorylation; tumour growth, cancer; apoptosis; prostate cancer; inflammation; fibrosis; fibrotic disease; scarring; peritoneal adhesion; lung fibrosis; conjunctival scarring; cytostatic;
                             Human Jun N-terminal kinase 2 (JNK2) oligonucleotide #3
                                                                                                                                                                                                                                                                                                                              Nero PS,
                                                                                                                                                                                                                                                                                                                                                                                                            Claim 25; SEQ ID NO 31; 71pp; English.
                                                                                                   antiinflammatory; vulnerary; ss
                                                                                                                                                                                                    97US-00910629.
98US-00130616.
99US-00287796.
99US-00396902.
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                                                                                                                                                                                                                                             31-JAN-2001; 2001US-00774809
          (first entry)
                                                                                                                                                                                                                                                                MCKAY R.
DEAN N M.
MONIA B P.
NERO P S.
GAARDE W A.
                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-168941/16.
                                                                                                                                            JS2004029823-A1.
                                                                                                                         Homo sapiens.
          01-JUL-2004
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15-SEP-1999;
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                                                                                                                                                                                                                                                                                              (NERO/)
(GAAR/)
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Gaarde WA;

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connected by covalent linkages, where the oligonuclectide has a sequence specifically hybridisable with a nucleic acid encoding a Jun N-terminal kname (JNK) protein and modulates the expression of the JNK protein. The invention also relates to a pharmaceutical composition comprising the oligonucleotide(s) or its bioequivalent and a pharmaceutical carrier, a method of treating an animal having, suspected of having or prone to having a hyperproliferative disease, a method of modulating the expression of a JNK protein in cells or tissues, a method of modulating carlicycle progression, phosphorylation of a protein phosphorylated by a JNK protein and expression of a cellular protein that prometes one or more metastatic events in cultured cells or the cells of an animal, a cell and an animal a method of treating an animal having a disease or condition associated disease or condition characterised by a reduction in apoptosis and composition as condition associated with a JNK protein. The oligonucleotide and composition are useful in classociated with a JNK protein (e.g. prostate cancer), a disease or condition associated with a JNK protein (e.g. prostate cancer), a disease or condition cassociated with a JNK protein (e.g. protein enterpression (e.g. cancer), or in inhibiting the growth of a tumour. This sequence conduction (e.g. cancer), or in inhibiting the growth of a tumour. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.0%; Score 17; DB 1; Length 20; 100.0%; Pred. No. 2.7e+02; ive 0; Mismatches 0; Indels
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Gaps ò

Conservative

Local Similarity nes 17; Conserv

Matches Best

Query Match

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The invention relates to an oligonucleotide comprising 8-30 nucleotides connected by covalent linkages, where the oligonucleotide has a sequence specifically pybridisable with a nucleic acid encoding Jun N-terminal kinase (JNK) protein and modulates the expression of the JNK protein. The consolidates to a pharmaceutical composition comprising the coligonucleotide(s) or its bioleguivalent and a pharmaceutical carrier, a method of treating an animal having, suspected of having or prone to having a hyperproliferative disease, a method of modulating the capression of a JNK protein in cells or tissues, a method of modulating cell cycle progression, phosphorylation of a protein phosphorylated by a JNK protein and expression of a cultured cells or the cells of an animal, a method of inhibiting the growth of a tumour in an animal, a method of inhibiting the growth of a tumour in an animal, a method of inhibiting the growth of a tumour in an animal, a method of treating an animal having a disease or condition associated with a JNK protein. The oligonucleotide and composition associated with a JNK protein. The oligonucleotide and composition associated reduction in apoptosis (e.g. prostate cancer), a disease or condition characterised by a ceduction in apoptosis (e.g. prostate cancer), a disease or condition associated associated with a JNK protein (e.g. scarring, peritoneal adhesions, lung fibrosis, disease or condition (e.g. scarring, peritoneal adhesions, lung fibrosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New oligonucleotides, which specifically hybridizes with Jun N-terminal kinase protein, useful in diagnosing or treating inflammation, fibrosis or a fibrotic or hyperproliferative disease or condition.
                                                                                                                                                                                                                                                                                             hyperproliferative disease; cell cycle progression; protein phosphorylation; tumour growth; cancer; apoptosis; protein cancer; inflammation; fibrosis; fibrotic disease; scarring; peritoneal adhesion; lung fibrosis; conjunctival scarring; cytostatic; antiinflammatory; vulnerary; ss.
                                                                                                                                                                                                                                                                          Human; Jun N-terminal kinase; JNK; Jun N-terminal kinase 2; JNK2;
                                                                                                                                                                                                                                   Human Jun N-terminal kinase 2 (JNK2) oligonucleotide #14
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98US-00130616.
99US-00287796.
99US-00396902.
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GACTTTGGCCTGGCCCG
                                                                                                                 ADN48331 standard; DNA; 20
                                                                                                                                                                                                01-JUL-2004 (first entry)
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MONIA B P.
NERO P S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GAAR/) GAARDE W A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004029823-A1.
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(DEAN/) 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (NERO/)
                                                                                               ADN4833
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inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease. This sequence represents an immunostimulatory nucleic acid

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promotes one or more metastatic events in cultured cells or the cells of an animal) by administering the oligonuclectide to the cells, inhibiting the growth of a tumour in an animal by administering the oligonuclectide to the cells, inhibiting the growth of a tumour in an animal by administering the oligonuclectide in a cell by contacting a cell with an AS oligonuclectide for JNK2 and treating a human having a disease or condition associated with a JNK protein or characterised by a reduction in apoptosis by administering to reduction the associated with a JNK protein contaction characterised by a reduction in apoptosis, such as a disease or condition characterised by a reduction in apoptosis, such as prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic disease or condition (e.g. fibrotic scarring), hyperproliferative disease or condition, such as cancer. The antisense oligonuclectides may also be used as research agents and diagnostic aids, to detect the presence of JNK protein-specific nucleic acids in a cell or tissue sample, and to study the function of one or more genes in the animal. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention describes a method of treating non-allergic inflammatory disease comprising administering to a subject having or at risk of developing a non-allergic inflammatory disease an immunostimulatory nucleic acid for prevention or treatment of the disease. The method is useful for treating non-allergic inflammatory diseases, such as psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Immunostimulatory, antiinflammatory, dermatological, antipsoriatic, antiulcer; gene therapy, vaccine; non-allergic inflammatory disease, psoriasis; eczema; allergic contact dermatitis; latex dermatitis; inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Treating non-allergic inflammatory diseases, such as psoriasis, ecz
allergic contact dermatitis, latex dermatitis or inflammatory bowel
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disease by administering an immunostimulatory nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                       1.0%; Score 17; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Pred. No. 2.7e+02; ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Immunostimulatory nucleic acid #301.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1033 GACTTTGGCCTGGCCCG 1049
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Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a method of treating or preventing allergy or asthma which comprises administering to a subject a poly-G nucleic acid in an aerosol formulation. The methods and compositions of the present invention are useful for diagnosing and/or treating asthma and allergy especially in a hypo-responsive subject. The present sequence represents an immunostimulatory nucleic acid of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treating and/or preventing allergy or asthma using an immunostimulatory nucleic acid alone or in combination with an asthma/allergy medicament.
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                                                                                                                                                                                                                                                                                                                                     ds; allergy; asthma; poly-G nucleic acid; aerosol formulation; hypo-responsive subject; immunostimulatory.
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                                                                  Length 20;
                                                                                              0; Indels
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                                      Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
                                                                1.0%; Score 17; DB 1; Le
100.0%; Pred. No. 2.7e+02;
vative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fouron Y;
                                                                                                                                                                                                                                                                                                            Immunostimulatory nucleic acid #299.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 9; 221pp; English.
                                                                                                                          1033 GACTITGGCCTGGCCCG 1049
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                                                                                                                                                                                                                          ADB36685 standard; DNA; 20 BP.
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                                                                                                                                                    GACTTTGGCCTGGCCCG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-FEB-2001; 2001US-00776479.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-FEB-2000; 2000US-0179991P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bratzler RL, Petersen DM,
                                                                                                                                                                                                                                                                                04-DEC-2003 (first entry)
                                                                                              17; Conservative
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ч й
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                                                                  Query Match
Best Local Similarity
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Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (BEAT/) BRATZLER
(PETE/) PETERSEN
(FOUR/) FOURON Y.
                                                                                                                                                                                                                                                                                                                                                                                                            US2003087848-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                        08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                    20
                                                                                                                                                                                                                                                      ADB36685;
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Gaps

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Indels

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Pred. No. 2.7e+02; Mismatches

100.08;

Best Local Similarity

Conservative

17;

Matches

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New oligonucleotides which hybridizes to, and modulates the expression of Jun N-terminal kinase, useful for treating a disease or condition characterized by a reduction in apoptosis, e.g. prostate cancer,
               ss; human; Jun N-terminal kinase; JNK1; JNK2; JNK3; cytostatic; antiinflammatory; apoptosis; prostate cancer; prostate tumour; inflammation; fibrosis; fibrotic disease; fibrotic scarring; peritoneal adhesion; lung fibrosis; conjunctival scarring; hyperproliferative disease; cancer; probe.
Human JNK2 sense control oligonucleotide ISIS12560.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seguence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                  Nero P,
                                                                                                                                                                                                                                                                                                                                 Example 4; Page 26; 69pp; English.
                                                                                                                                             97US-00910629.
98US-00130616.
99US-00287796.
99US-00396902.
                                                                                                                                                                                                                                                  Mckay R, Dean NM, Monia BP,
                                                                                                                            31-JAN-2001; 20:01US-00774809.
                                                                                                                                                                                                                                                                                                                inflammation or fibrosis.
                                                                                                                                                                                         MCKAY R.
DEAN N M.
MONIA B P.
NERO P.
                                                                                                                                                                                                                                                                  WPI; 2003-311908/30
                                                                                                                                                                                                                               GAARDE W A.
                                                                                        US2003004120-A1
                                                                       Homo sapiens
                                                                                                                                               13-AUG-1997;
                                                                                                                                                         07-AUG-1998;
                                                                                                                                                                07-APR-1999;
15-SEP-1999;
                                                                                                           02-JAN-2003
                                                                                                                                                                                                             (MONI/)
(NERO/)
                                                                                                                                                                                           (MCKA/)
                                                                                                                                                                                                                                (GAAR/)
                                                                                                                                                                                                     (DEAN/)
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Gaarde WA;

The invention relates to an oligonucleotide (antisense, AS) comprising 830 nucleotides connected by covalent linkages, where the oligonucleotide
has a sequence specifically hybridisable with a nucleic acid encoding a
Jun N-terminal kinase (JMK) protein and modulates the expression of the
Jun N-terminal kinase (JMK) protein and modulates the expression of the
Jun N-terminal kinase (JMK) protein and modulates the expression of the
CC JUN protein. Also included are a pharmaceutical composition comprising
CC carrier), treating an animal having/suspected of having/prone to having a
CC carrier), treating an animal having/suspected of having/prone to having a
CC carrier), treating an animal having lengthed to a prophylactic or
CC therapeutic amount of the composition of the AS oligonucleotide,
modulating the cells or tissues with the AS oligonucleotide,
modulating the cells or tissues with the AS oligonucleotide,
contacting the cells or tissues with the AS oligonucleotide,
modulating the cells or tissues with the AS oligonucleotide,
contacting the cells or tissues with the AS oligonucleotide,
modulating
contacting the cells or the phosphorylation of a protein that
contacting apoptosis in a call by contacting a cell with an AS
condition associated with a JMK protein or characterised by a reduction
condition associated with a JMK protein or characterised by a reduction
in apoptosis by administering a prophylactic or therapeutic amount of the
AS oligonucleotide. The antisense oligonucleotide is useful for treating
a disease or condition characterised by a reduction in apoptosis, such as
prostate cancer or prostate tumour, inflammation, fibrosis or conjunctival scarring, hyperproliferative disease or
condition, such as cancer. The antisense oligonucleotides may also be
condition, such as cancer. The antisense oligonucleotide such as the function of one or more genes in the new of the constitution of the one or more genes in the nimal. The present sequence is a sense control oligonucleotide for antisense oligonucleotides targeting a human JNK.

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1.0%; Score 17; DB 1; Length 20;
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Query Match

The invention relates to an oligonucleotide (antisense, AS) comprising 8-30 nucleotides connected by covalent linkages, where the oligonucleotide has a sequence specifically hybridisable with a nucleic acid encoding a Jun N-terminal kinase (JNK) protein and modulates the expression of the JNK protein. Also included are a pharmaceutical composition comprising the AS oligonucleotide (or its bloequivalent, and a pharmaceutical carrier), treating an animal having/suspected of having/prone to having a hyperproliferative disease (by administering to a prophylactic or therapeutic amount of the composition of the AS oligonucleotide), contacting the expression of a JNK protein in cells or tissues by contacting the cells or tissues with the AS oligonucleotide, modulating the expression (or the phosphorylation of a protein phosphorylated by a JNK protein, or expression of a cellular protein that New oligonucleotides which hybridizes to, and modulates the expression of Jun N-terminal kinase, useful for treating a disease or condition characterized by a reduction in apoptosis, e.g. prostate cancer, inflammation or fibrosis. Human Jun N-terminal kinase, JNK2, antisense oligonucleotide ISIS12560. conjunctival scarring; hyperproliferative disease; cancer; probe ss; human; Jun N-terminal kinase; JNK1; JNK2; JNK3; antisense; cytostatic; antiinflammatory; apoptosis; prostate cancer; prostate tumour; inflammation; fibrosis; fibrotic disease; fibrotic scarring; peritoneal adhesion; lung fibrosis; /note= "Phosphorothioate linkages" Gaarde WA; Monia BP, Nero P, Location/Qualifiers Claim 25; Page 25; 69pp; English. /mod base= OTHER 0; 1049 BP. 97US-00910629. 98US-00130616. 99US-00287796. 99US-00396902. 31-JAN-2001; 2001US-00774809 GACTITGGCCTGGCCCG 1033 GACTITGGCCTGGCCCG ADA26578 standard; DNA; 20 ..20 *tag= a (first entry) WPI; 2003-311908/30. Dean NM, GAARDE W A. DEAN N M. MONIA B P. MCKAY R. US2003004120-A1 modified base sapiens 15-SEP-1999; 20-NOV-2003 13-AUG-1997; 07-AUG-1998; 07-APR-1999 02-JAN-2003 ADA26578 Mckay R, (MCKA/) (GAAR/) (DEAN/) (/INOW) (NERO/) Homo à 셤

Tue Nov

GACTTTGGCCTGGCCCG

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g

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The invention relates to inhibiting angiogenesis in a subject, comprising administeraring at least one antianglogenic mucleic acid molecule. Also included is a kit comprising a first container housing the antianglogenic mucleic acids, and instructions for administering them to a subject mucleic acids, and instructions for administering them to a subject having a condition characterised by unwanted angiogenesis. The method is useful for inhibiting angiogenesis associated with solid tumour growth, tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis, corneal graft rejection, neovascular glaucoma, retrolental fibroplasis, rubocais, Osler Webber Syndrome, myocardial angiogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints, angiofibroma, wound granulation, intestinal adhesions, atherosclerosis, scleroderma and hypertrophic scars. The present sequence is an antiangiogenic nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inhibiting angiogenesis in a subject, involves administering at least one antiangiogenic nucleic acid molecule to the subject.
                                                                                                                                                                        Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth; tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis; diabetic retinopathy; retinopathy of prematurity; macular degeneration; corneal graft rejection; neovascular glaucoma; retrolental fibroplasia; rubeosis; Osler-Webber Syndrome; myocardial angiogenesis; plaque neovascularisation; telangiectasia; haemophiliac joint; angiofibroma; wound gramulation; intestinal adhesion; atherosclerosis; scleroderma; hypertrophic scar.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.0%; Score 17; DB 1; Length 20;
100.0%; Pred. No. 2.7e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                     Angiogenesis inhibitory oligonucleotide #311.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (COLE-) COLEY PHARM GROUP INC.
                    BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-DEC-2001; 2001WO-US048458
                    ABS77827 standard; DNA; 20
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                                                                                                (first entry)
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                                                                                                13-DEC-2002
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                                                         ABS77827;
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ABL39057/c
ID ABL390
ABS77827/c
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ABL39057 standard; DNA; 20 BP

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Treating or preventing cancer, such as basal cell carcinoma, comprises administering immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies to a subject having or at risk of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                    Antibody-induced cell lysis; cancer; immunostimulatory; CD20; angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.0%; Score 17; DB 1; Length 20; 100.0%; Pred. No. 2.7e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                         /*tag= a
/mod_base= OTHER
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                   Immunostimulatory nucleic acid SEQ ID NO: 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, Page 212; 312pp; English.
                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  exemplification of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                      22-JUN-2000; 2000US-0213346P.
                                                                                                                                                                                                                                                                                                                                                                                    22-JUN-2001; 2001WO-US020154
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                                                 (first entry)
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Best Local Similarity 100.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    developing cancer
                                                                                                                                                                                                                                                                                                                  WO200197843-A2
                                                                                                                                                                                                                          modified base
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                                                 16-APR-2002
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                                                                                                                                                                         Synthetic
              ABL39057;
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Sequence 20.BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-273485/28.
                                Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                         25-SEP-1999;
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                                                                                                                                                                                                                                                                                                                                       Synthetic.
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     nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in decrease of JNX2 expression and leading to induction of apoptosis. The present sequence is one such antisense oligonucleotide. The oligonucleotides of the present invention are useful for treating diseases or conditions with reduced apoptosis, e.g. cancer and cellular hyperproliferation. The oligonucleotides may also be used to increase the stimulation of apoptotic proteins, e.g. for treating Alzheimer's or Parkinson's disease, amylotrophic lateral sclerals, retinitis,
                                                                                                        pigmentosa, epilepsy, mycardial infarction, stroke, obstructive jaundice, polycystic kidney and diabetes. The present sequence may have a phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "This oligonucleotide is a 2'-O-methoxyethyl (MOE) chimeric antisense oligonucleotide containing five MOE/phoshopdiester residues flanking a 2'-deoxymucleotide/phosphorothioate region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Use of Jun Kinase antisense mRNA for treating cancer by administering vector comprising promoter operably linked to DNA sequence that encodes the antisense mRNA to patient diagnosed with cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to the use of Jun Kinase (JNK) antisense oligonucleotides for treating cancer and for screening compounds that mimic or augment the effect of JNK antisense oligonucleotides treatment for cancer. The present sequence is one such JNK antisense oligonucleotide
AAA96093-A96099 and AAA07993) that hybridise specifically to a
                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                             JNK; jun kinase; antisense; cytostatic; cancer;
2'-O-methoxyethyl oligonucleotide; MOE; phosphorothioate; ss.
                                                                                                                                                                                     1.0%; Score 17; DB 1; Length 20; 100.0%; Pred. No. 2.7e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                     JNK1 antisense oligonucleotide, JNK2AS, (ISIS #12560)
                                                                                                                                                            Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
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/mod_base= OTHER
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                                                                                                                                                                                                                                       GACTTTGGCCTGGCCCG 1049
                                                                                                                                                                                                                                                                                                                             BP.
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                                                                                                                                                                                                                                                              GACTTTGGCCTGGCCCG
                                                                                                                                                                                                                                                                                                                            AAH23754 standard; DNA; 20
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ses 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                             20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic; immunostimulatory; tumour; viral infection; bacterial infection; fungal infection; parasitic infection; cancer; asthma; infections disease; allergy; immune deficiency; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vaccinating against tumors, infectious diseases, allergies and asthma using immunostimulatory Py-rich and TG nucleic acids.
                                                                     Gaps
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0
1.0%; Score 17; DB 1; Length 20; 100.0%; Pred. No. 2.7e+02; ative 0; Mismatches 0; Indels
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100.0%; Pred. No. 2.7e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Immunostimulatory nucleic acid #299.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 101; Page 44; 338pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>ن</u>
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                                                                                                                                       1033 GACTTTGGCCTGGCCCG 1049
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Best Local Similarity
Local 17; Conservative
                                                                                                                                                                                                     GACTTTGGCCTGGCCCG
                                                                                                                                                                                                                                                                                                                                                                        AAF99183 standard; DNA; 20
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                                                                        Conservative
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08-DEC-1999; 10-DEC-1998;

Monia BP,

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The present invention relates to antisense oligonucleotides (AAC62844-C63000, AAA6099-A96099 and AAA0799) that hybridise specifically to a nucleotide encoding a Jun N-terminal kinase (JMK2) protein, resulting in decrease of JMK2 expression and leading to induction of apoptosis. The present sequence is one such antisense oligonucleotide. The oligonucleotides of the present invention are useful for treating diseases or conditions with reduced apoptosis, e.g. cancer and cellular hyperproliferation. The oligonucleotides may also be used to increase the stimulation of apoptotic proteins, e.g. for treating Alzheimer's or Parkinson's disease, amylotrophic lateral sclerosis, retinitis, pigmentosa, epilepsy, myocardial infarction, stroke, obstructive phosphorothioate backbone
                                                                      Novel methods for reducing apoptosis comprising contacting cells with antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel methods for reducing apoptosis comprising contacting cells with antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense, gene therapy, JNK2 protein, apoptosis, cancer, cellular hyperproliteration, Alzeimer, si Parkinson's disease, amylotrophic lateral scletosis, retinitis, pigmentosa, epilepsy, myocardial infarction, stroke, obstructive jaundice, polycystic kidney,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to antisense oligonuclectides (AAC62844-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 17; DB 1; Length 20; Pred. No. 2.7e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 1.0%; Score 17; DB Best Local Similarity 100.0%; Pred. No. 2.7 Matches 17; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nero PS,
                                                                                                                                                                        Example 4; Page 135; 160pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diabetes; Jun N-terminal kinase; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-638427/61
                    WPI; 2000-638427/61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 127
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                                                                                                                                                                                                                                                                                                                                                                                                                attisense inhibition of a tumour necrosis factor (TNF) alpha signalling molecule. In the method TNF alpha signalling molecules Ha-ras, c-raf and c-Jun N-terminal kinase (UNK)2 were inhibited by antisense clustense oligomucleotides. In addition an antisense oligomucleotide to the cell adhesion molecule E-selectin was also examined. The present sequence is the UNK2 antisense oligomucleotide. The antisense oligomucleotides used in the method contained modifications, namely phosphorothicate linkages and 2 methoxyethoxy bases. Some C residues also had a 5 methyl and 2 methoxyethoxy bases. Some C residues also had a 5 methyl cantinhicate inhibitors of the TNF alpha signalling molecules have antibhacterial immunosuppressive, antiphosoriatic, antidabetic, antithyroid, cytostatic, dermatological, antiallergic and antithifammatory activity. The antisense inhibitors may be useful for the treatment of sepsis, rheumatoid arthritis, inflammatory will immune disease, allergic contact dermatitis, psoriasis, inflammatory bowel disease, allergic contact dermatitis, psoriasis,
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                                                                                                                                                                                                                                                                                                                                                                                                   A novel method for modulating cell adhesion molecule expression involves
                                                                                                                                                                                                                                            Modulating cell adhesion molecule expression for treating immune or inflammatory diseases involves treating cell with specific inhibitor of Tumor Necrosis Factor alpha signaling molecule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cellular hyperproliferation; Alzheimer's; Parkinson's disease; amylotrophic lateral sclerosıs; retinitis; pigmentosa; epilepsy; myocardial infarction; stroke; obstructive jaundice; polycystic kidney; diabetes; Jun N-terminal kinase; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                 Claim 36; Page 46; 100pp; English
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99WO-US028965.
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                                                                                                (ISIS-) ISIS PHARM INC
                                                                                                                                                                                             WPI; 2000-423367/36
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06-FEB-2001

AAC62885;

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Query Match Best Local 9

Matches

20

RESULT 126

AAC62885

07-APR-1999;

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RESULT 125
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                                                                                                                      New antisense oligonucleotides that detect and modulate the expression of Jun N-terminal kinase proteins - useful for treating hyperproliferative diseases and inhibiting tumor growth in animals, and for modulating protein phosphorylation by these proteins.
                                                                                                                                                                                           The invention relates to antisense oligonucleotides that detect and modulate the expression of Jun N-terminal kinase (JNK) proteins. The oligonucleotides specifically hybridize to a nucleic acid encoding a JNK1, JNK2 or JNK3 protein, and which modulate expression of these proteins. The oligonucleotides are useful for modulating JNK protein. The oligonucleotides are useful for modulating JNK protein. The oligonucleotides are also useful for modulating the phosphorylation of a protein that has been phosphorylated by a JNK protein, and the expression of a cellular protein that promotes one or more metastatic events. The oligonucleotides also form pharmaceutical compositions for treating animals with a hyperproliferative disease, and for inhibiting tumor growth in an animal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1; JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe; hyperproliferative disease; human; ss.
                                                                                                                                                                                                                                                                                                                                                                           Gaps
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Pred. No. 2.7e+02;
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                                                                                Gaarde WA;
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100.0%; Pred. No. 2...
                                                                                Monia BP, Nero PS,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JNK2-specific probe ISIS No: 12560.
                                                                                                                                                                           Example 4; Page 92; 190pp; English.
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                    98WO-US016488.
                                       97US-00910629.
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Best Local Similarity 100.
Marches 17; Conservative
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                                                           ISIS PHARM INC
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                                                                                                   WPI; 1999-181060/15
                                                                                Mckay R, Dean N,
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                    07-AUG-1998;
                                       13-AUG-1997;
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 25-FEB-1999
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antisense oligonucleotides that detect and modulate the expression of
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                    Jun N-terminal kinase proteins - useful for treating hyperproliferative diseases and inhibiting tumor growth in animals, and for modulating protein phosphorylation by these proteins.
                                                                                                                                                                                            The invention relates to antisense oligonucleotides that detect and modulate the expression of Jun N-terminal kinase (JMK) proteins. The oligonucleotides specifically hybridize to a nucleic acid encoding a JMK1, JMK2 or JMK3 protein, and which modulate expression of these expression and cell cycle progression in cultured cells or animal cells repression and cell cycle progression in cultured cells or animal cells. The oligonucleotides are also useful for modulating the phosphorylation of a protein that has been phosphorylated by a JMK protein, and the expression of a cellular protein that promotes one or more metastatic events. The oligonucleotides also form pharmaceutical compositions for treating animals with a hyperprollferative disease, and for inhibiting
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense oligonucleotide ISIS no.15354 to human JNK2 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 17; DB 1; Le
Pred. No. 2.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense; E-selectin; TNF alpha; cell adhesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Pred. No. -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                            Example 4; Page 87; 190pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "All bases
bases are m5c"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1049
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1033 GACTTTGGCCTGGCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA48651 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mod base=
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/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tumor growth in an animal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 17; Conserv
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sickle cell retinopathy; ss.

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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (I) can have antiposoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, cytostatic, antiseborrheic, antidiabetic, and cleaves RNA encoding (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, cyquences ruch as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing processor scarting such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                            Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.0%; Score 17.4; DB 1; Length 19; 4.7%; Pred. No. 2.2e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human microarray DNA oligonucleotide SEQ ID NO 39567.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 97; 408pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1028 TGGCTGACTTTGGCCTGGC 1046
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                                                                                                                                                                    26-OCT-2000; 2000WO-US029500.
                                                                                                                                                                                                          99US-0161532P.
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Matches 18; Conservative
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                                                                                                                                                                                                                                                                                    Robbins JM, Tritz R;
                                                                                                                                                                                                                                              IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                        WPI; 2001-300427/31.
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                                                                                          WO200130362-A2
                                  Homo sapiens.
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                                                                                                                                03-MAY-2001
                                                      Synthetic.
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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in analysis of genetic variation or in hybridisation to a DNA library, compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises computing probes are target neor more nucleic acid probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring core family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid brobes is useful in in situ hybridisation, in Southern, Northern or dotbothy brimes attached to dentify or detect the sequence or specific mattations of any gene, in mapping the 5' termin of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones containing sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence of data for this patent can also be obtained in electronic format directly from inspendent the microarray. Note: The sequence of the form inspendent and also consequence the microarray. Note: The sequence of the format directly and senders and second processes in the microarray. Note: The sequence of the form inspendent and previously sequence or specific and areadata many conclusing the microarray. Note: The sequence of the form inspendent and also conclused the microarray. Note: The sequence of the form inspendent and previously sequence or specific and areadata many conclusing the sequence or specific and areadata many conclusing the sequence 
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                                                                                                                                                                                                                                                                                                                      New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chemically modified sense control probe ISIS No: 14318.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     from USPTO at seqdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 39567; 9pp; English
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                                                                      15-MAR-2002; 2002US-00098263.
                                                                                                                        16-MAR-2001; 2001US-0276759P.
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                                                                                                                                                                       (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                       WPI; 2003-567953/53.
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es 19; Conserv
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                                                                                                                                                                                                                        Mittmann MP;
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                    05-JUN-2003
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WPI; 2001-300427/31.
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Best Local Similarity
Matches 18; Conserv
                                              WO200130362-A2
                                                                                                                                               26-OCT-1999;
                                                                                                                                                                                                                  Robbins JM,
                                                                                 03-MAY-2001
               Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA88415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                 Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                     New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin B1.
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                                                                                                                                                                                                                                                                                                                                                                   Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 51; 109pp; English.
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                                                                                                cdk3 ribozyme binding site #42
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BP
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                                                                                                                                                                                                                                                                                                  98US-0110954P.
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                                                                 (first entry)
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AAA82757 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                   Tritz R, Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-412314/35
                                                                                                                                                                                                                                                                                                                                  (IMMIN-) IMMINSOF INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                   WO200032765-A2.
                                                                                                                                                                                                                                                                   06-DEC-1999;
                                                                                                                                                                                                                                                                                                   04-DEC-1998;
                                                                 04-DEC-2000
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                                                                                                                                                                                                                                  38-JUN-2000
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                                                                                                                                                                    Mammalia.
                               AAA82757
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AAH57919
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [1] which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule [II] comprising a promoter operably linked to a nucleic acid segment encoding [I]. (I) can have antipsoriatic, cophthalmological, cytostatic, antiseborrheic, antidiabetic, antisickling, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermaticis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing carring such as keloid, adhesion and hypertrophic or hypertrophic burn secur. AMMSTOTY to AMH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiesborrheic; antidiabetic; virucide; antisickling; ophthalmological; scarcioltic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
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Pred. No. 2.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 96; 408pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             993 GAACCTGCTCATCAACGAG 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
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26-OCT-2000; 2000WO-US029500.
                                                                                               99US-0161532P
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10-JUN-2002; 2002US-0387866P.
11-JUN-2002; 2002US-0387666P.
11-JUN-2002; 2002US-0387666P.
11-JUN-2002; 2002US-0387668P.
11-JUN-2002; 2002US-0387668P.
11-JUN-2002; 2002US-0387668P.
12-JUN-2002; 2002US-0387934P.
12-JUN-2002; 2002US-0387960P.
12-JUN-2002; 2002US-0387960P.
12-JUN-2002; 2002US-038892P.
12-JUN-2002; 2002US-0388123P.
13-JUN-2002; 2002US-0389120P.
14-JUN-2002; 2002US-0389120P.
14-JUN-2002; 2002US-0389120P.
14-JUN-2002; 2002US-0389144P.
15-JUN-2002; 2002US-0389144P.
16-JUN-2002; 2002US-0389144P.
19-JUN-2002; 2002US-0389144P.
19-JUN-2002; 2002US-0389144P.
                                                                                                                                                                                              2002US-0390209P.
2002US-0491628P.
2002US-0401628P.
2002US-0402268P.
2002US-040382P.
2002US-0403458P.
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2002US-0406182P.
2002US-0410085P.
2002US-0410505P.
                                                                                                                                                                                                                                                                                            2002US-0412955P.
2002US-0415195P.
                                                                                                                                                                                                                                                                                                           23-0CT-2002; 2002US-0420627P.
23-0CT-2002; 2002US-042071BP.
24-0CT-2002; 2002US-0420852P.
31-0CT-2002; 2002US-0422750P.
                                                                                                                                                                                                                                                                                                                                              2002US-0423095P
                                                                                                                                                                                                                                                         15-AUG-2002; 2
26-AUG-2002; 2
12-SEP-2002; 2
13-SEP-2002; 2
33-SEP-2002; 2
                                                                                                                                                                                     19-JUN-2002;
25-JUN-2002;
25-JUN-2002;
06-AUG-2002;
                                                                                                                                                                                                                                         13-AUG-2002;
15-AUG-2002;
                                                                                                                                                                                                                        09-AUG-2002;
                                                                                                                                                                                                                                12-AUG-2002;
                                                                                                                                                                                                                                                                                                                                              01-NOV-2002;
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(CURA-) CURAGEN CORP.

Kekuda R; Burgess CE, Casman SJ, Catterton E, Danabal M, Edinger ST,
Burgess CE, Casman SJ, Catterton E, Danabal M, Edinger SR,
Ellerman K, Ettenberg S, Gangolli EA, Gerlach VL, Gorman L;
Grosse WM, Gunther E, Guo X, Gusev VY, Herrmann JL, Ji W, Kekuda J
Khramtsov NV, Larochelle WJ, Li L, Liang H, Low K, Macdougall JR,
Maclachlan T, Malyankar UM, Mcqueeney K, Mezick AJ, Miller E,
Millet I, Padigaru W, Patturajan M, Peyman JA, Qian K, Rastelli L,
Rieger DK, Rothenberg ME, Shenoy SG, Shimkets RA, Smithson G,
Spytek KA, Stone DJ, Sukmmaran S, Szekeres ES, Vernet CAM, Voss EZ,
Wolenc AR, Zhong M, Zhong H;

WPI; 2004-053467/05.

New NOVX polypeptides and nucleic acid molecules useful for preventing or treating NOVX-associated disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, in chromosome mapping, tissue typing or pharmacogenomics.

Disclosure, SEQ ID NO 1453, 1503pp, English.

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Gaps

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Indels

1.0%; Score 17.4; DB 1; Length 19; 94.7%; Pred. No. 2.2e+02;

0; Mismatches

1028 IGGCIGACTITGGCCIGGC 1046 TGGCTGACTTCGGCCTGGC 19

8 g RESULT 119 AAA82757

Best Local Similarity 94.7 Matches 18; Conservative

Query Match

The invention relates to 566 new isolated human polypeptides and their encoding genes, sequences that are at least 95% identical to these or sequences comprising one or more conservative substitutions in these. The polypeptide, polynucleotide and antibodies against the polypeptides are useful in diagnosing, treating or preventing NOVX-associated disorders, e.g. cardiomyopathy, atherosclerosis, hypertension, cancer, obesity, diabetes, AIDS, multiple sclerosis, graft-versus-host disease, Alzheimer's disease, Parkinson's disease, asthma, or fertility disorders.

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The nucleic acids are further used as hybridization probes, in chromosome ampping, tissue typing, preventive medicine, and pharmacogenomics. The polypeptides are also useful as vaccines. This sequence represents an example of a probe used to isolate the nucleic acid sequences of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in RAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present invention relates to a hairpin or hammerhead ribozyme
                                                                                                                                                              ö
                                                                                                                            1.0%; Score 17.6; DB 1; Length 26; 83.3%; Pred. No. 2.7e+02;
                                                                                                                                                            4; Indels
                                                                                              Sequence 26 BP; 10 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Robbins JM;
                                                                                                                                                            0; Mismatches
                                                                                                                                                                                          972 ACACCGAGACCTCAAGCCCCAGAA 995
                                                                                                                                                                                                                     1 ATACCGAGACCTGAAACCCCACAA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 51; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                                       cdk3 ribozyme binding site #46.
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                                                                                                                                                                                                                                                                                                        AAA82761 standard; DNA; 19
                                                                                                                  Query Match
Best Local Similarity 83.33
                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (IMMU-) IMMUSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-412314/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200032765-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-DEC-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JUN-2000
                                                               invention.
                                                                                                                                                                                                                                                                                                                                       AAA82761;
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03-APR-2001; 2001US-0281086F.
05-APR-2001; 2001US-028136F.
05-APR-2001; 2001US-02819667.
06-APR-2001; 2001US-02819067.
10-APR-2001; 2001US-0282324P.
12-APR-2001; 2001US-0282312P.
13-APR-2001; 2001US-0285325P.
23-APR-2001; 2001US-0285325P.
24-APR-2001; 2001US-0285325P.
25-APR-2001; 2001US-0286592P.
25-APR-2001; 2001US-0286592P.
27-APR-2001; 2001US-0286257P.
27-APR-2001; 2001US-029134P.
17-MAY-2001; 2001US-029134P.
17-MAY-2001; 2001US-0291725P.
18-JUN-2001; 2001US-0291728P.
18-JUN-2001; 2001US-0291728P.
11-NOV-2001; 2001US-029128P.
12-JUL-2001; 2001US-039128P. 04-JAN-2002; 2002US-0345221P 02-APR-2002; 2002US-00345221 WO200281629-A2 17-OCT-2002.

multiple sclerosis, ataxia-telangiectasia, leukodystrophy, auxiety, behavioural disorder, addiction, neuroprotection, diabetes; ARDS; renal artery stenosis, interstitial nephritis, glomerulonephritis, golycystic kidney disease; systemic lupus erythematosus, 1gA; probe, renal tubular acidosis; immunoglobulin A nephropathy; hypercalcaemia, cirrhosis; transplantation; asthma; emphysema; scleroderma; GVHD; adult respiratory distress syndrome; graft versus host disease; lymphedema; fertility; pancreatitis; obesity; haemophilia; ulcer; anaemia; cancer; trauna; regeneration; infection; RTQ-PCR; Huntington's disease; cerebral palsy; Lesch-Nyhan syndrome; pain; real-time quantitative PCR.

Homo sapiens.

03-APR-2002; 2002WO-US010522

CURA-) CURAGEN CORP.

A, Li L, Edinger SR, Ellerman K, Stone DJ, Malyankar UM; RR, Guo X, Anderson DW, Patturajan M, Berghs C, Gerlach V, RJ, Pena CEA, Padigaru M, Liu Y, Burgess CE, Miller CE; Kekuda R, Gorman L, Zerbusen BD, Baumgartner JC; VI, Vernet CAM, Smithson G, Heyes MP, Shenoy SG, Liu X; Tchernev VT, Gangolli EA; raupier RJ, Spytek KA, Gusev VY,

WPI; 2003-046863/04.

New polypeptides, designated NOVX polypeptides, useful for treating hemophilia, idiopathic thrombocytopenic purpura, autoimmune disease, allergies, transplantation, Alzheimer's disease and stroke.

Example C; Page 264; 320pp; English.

The invention relates to an isolated NOVX polypeptide selected from NOV1-NOV27 polypeptides, a mature form of NOVX, a variant of NOVX or a fragment of NOVX. Also included are determining the presence or amount of NOVX in a sample (by using an antibody that immunospecifically bind to the polypeptide), determining the presence of or predisposition to disease associated with altered levels of NOVX in a first mammalian subject, identifying a potential therapeutic agent for use in the treatment of pathology related to aberrant expression of physiological interactions of NOVX, screening for a modulator of activity or of latency or predisposition to a pathology associated with NOVX, the nucleic acid encoding NOVX, vectors and host cells. NOVX is useful for identifying an agent (a cellular receptor or downstream effector) that binds to NOVX. NOVX and NOVX and NOVX nucleic acids are useful for treating or preventing NOVX-

for treating a NOVX related disease human disease e.g.

for treating a NOVX related disease human disease e.g.

derenoleukodystrophy, congeniteal adrenal hyperplasia, haemophilia,

hypercoagulation, idiopathic thrombocytopaenic purpura, autoimmune

disease, allergies, immunodeficiencies, transplantation, Von HippelLindau (VHL) syndrome, Alzheimer's disease, stroke, tuburous sclerosis,

cerhanson's disease, Huntington's disease, cerebral palsy, epilepsy,

Lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia,

centroprotection, diabetes, renal artery stenosis, interstitial nephritis,

controprotection, diabetes, renal artery stenosis, interstitial or paratic respiratory distress syndrome (ARDS), graft versus

controprotection, diabetes, renal artery distress syndrome (ARDS), graft versus

controprotection, diabetes, renal artery distress syndrome (ARDS), graft versus

controprotection, diabetes, renal artery distress syndrome (ARDS), graft versus

controprotection, distress syndrome (ARDS), graft versus

controprotection, distress syndrome (ARDS), graft versus

controprotection, distress syndrome is a real-time

controprotection of a NOVX mRNA ô Gaps .; 0 1.0%; Score 17.6; DB 1; Length 26; 33.3%; Pred. No. 2.7e+02; 4; Indels Sequence 26 BP; 10 A; 9 C; 4 G; 3 T; 0 U; 0 Other; 0; Mismatches 972 ACACCGAGACCTCAAGCCCCAGAA 995 1 ATACCGAGACCTGAAACCCCACAA 24 83.3%; Local Similarity 83.3 les 20; Conservative Query Match Matches 8 셤

cardiovascular, antiarteriosclerotic; hypotensive; cytostatic; anorectic; antidiabelic; lammonsuppressive; anti-HIV; neuroprotective; noctropic; antiparkinsonian; antiasthmatic; antiinfertility; cardiomyopathy; atherosclerosis; hypertension; cancer; obesity; diabetes; AIDS; multiple sclerosis; graft-versue-host disease; Albaimer; a disease; Parkinson's disease; asthma; fertility disorder; chromosome mapping; tissue typing; preventive medicine; pharmacogenomic; vaccine; probe; ss. Novel human nucleic acid NOVX gene probe Ag941. ADH42900 standard; DNA; 26 BP (first entry) WO2003102159-A2. Homo sapiens 25-MAR-2004 11-DEC-2003 ADH42900; RESULT 117 ADH42900

2002US-0386041P 2002US-038635P 2002US-0386447P 2002US-0386485P 2002US-0386465P 2002US-0386866F 2002US-0385615P. 2002US-0385755P. 04-JUN-2003; 2003WO-US017573 04-JUN-2002; 06-JUN-2002; 06-JUN-2002; 06-JUN-2002; 06-JUN-2002; 05-JUN-2002;

2002US-0386701P. 2002US-0386796P. 2002US-0386931P. 2002US-0387078P. 2002US-0387081P. 2002US-0387083P. 07-JUN-2002; 06-JUN-2002; 07-JUN-2002;

07-JUN-2002;

07-JUN-2002;

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New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
      EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; cross-species comparison.
                                                                                                                                                                                                  Claim 1; SEQ ID NO 83985; 9pp; English.
                                                                                     15-MAR-2002; 2002US-00098263.
                                                                                                     16-MAR-2001; 2001US-0276759P.
                                                                                                                    (AFFY-) AFFYMETRIX INC
                                                                                                                                                    WPI; 2003-567953/53.
                                                     JS2003104410-A1
                                     Homo sapiens
                                                                                                                                     Mittmann MP;
                                                                     05-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 115
                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK66872/
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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect march, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one or more nucleic acids to at least two or more nucleic acids probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dotblot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of muRh molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly Seguence 25 BP; 4 A; 4 C; 7 G; 10 T; 0 U; 0 Other; from USPTO at segdata.uspto.goc/sequence.html

Gaps ö 1.0%; Score 17.6; DB 1; Length 25; 33.3%; Pred. No. 2.6e+02; 4; Indels 0; Mismatches Query Match
Best Local Similarity 83.3%; 20; Conservative

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1056 GTCAATCCCAACAAGACATACTC 1079 Greanceragaaaaceracre 2

ABK66872 standard; DNA; 26 (first entry) 02-JUL-2002 ABK66872; MX B X B X B X B X B

Human gene specific PCR primer #960.

Primer; ss; DNA microarray; differential expression analysis; human.

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acids (NAs) comprising contacting a sample from a physiological acids (NAs) comprising contacting a NA sample from a physiological source, with a pool of 50 distinct gene specific primers under suitable conditions to enzymatically generate sub-population of NAs, where each gene specific primer has a sequence complementary to a distinct mRNA, and each labeled NA is generated using a sub-population of labeled NAs which is useful for analysing the differences in the RNA profiles between several different physiological sources, where the method comprises producing comprising the populations for the different physiological sources, comprising the population, where the comparison is preferably differences in the population, where the comparison is preferably comprising the patterns for each of the distinct to physiological sources to an array of probe NAs stably associated with the surface of a substrate to produce a hybridisation pattern for each of the sources, where differential gene expression assays are utilised in differential contaction analysis of diseased a normal tissue e.g. neoplastic a normal cissue, or different tissue or subsistence is a human gene specific PCR primer used in the method of the invention. Note: The sequence data for this patent of id not form part of the printed produced the contact of the printed periodical sources.
                                                                                                                                                                                                                                                                                                                                                    Producing sub-population of labeled nucleic acids, useful for analyzing differences in RNA profiles between several different physiological sources, using set of distinct gene specific primers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human, ss; NOVX; adrenoleukodystrophy; haemophilia; stoke; VHL; PCR; congenital adrenal hyperplasia; haemophilia; hypercoagulation; idiopathic thrombocytopaenic purpura; autoimmune disease; altergy; immunodeficiencies; transplantation; Von Hippel-Lindau syndrome; Alzheimer's disease; tuburous sclerosis; Parkinson's disease; epilepsy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to producing a sub-population of labeled nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.0%; Score 17.6; DB 1; Length 26; 83.3%; Pred. No. 2.7e+02;
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                                                                                                                                                                                                                                                                      Bibilashvilli R;
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; SEQ ID NO 960; 11pp; English.
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Best Local Similarity 83.3<sup>3</sup>
Marches 20; Conservative
                                                                                                                                                                                                                                                                      Jokhadze G,
                                                                                                                                                                                                                             (CLON-) CLONTECH LAB INC
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                                                                                                                                                                                 21-MAY-1997;
                   Homo sapiens
                                                          US6352829-B1
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Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL. Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Parched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss. 1.0%; Score 17.6; DB 1; Length 25; 13.3%; Pred. No. 2.6e+02; Sequence 25 BP; 7 A; 11 C; 2 G; 5 T; 0 U; 0 Other; Example 2; Page 533; 718pp; English. 30-JAN-2001; 2001WO-USC00664. 30-JAN-2001; 2001WO-USS000655. 30-JAN-2001; 2001WO-USC00667. 30-JAN-2001; 2001WO-US000668. 30-JAN-2001; 2001WO-US000669. 23-MAY-2001; 2001WS-08900669. 28-JAN-2002; 2002EP-00001167 83.3%; (AEOM-) AEOMICA INC WPI; 2002-676582/73 Local Similarity EP1229046-A2 30-JAN-2001; Homo sapiens 07-AUG-2002 Zhan J;

The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of the and disorder associated with decreased expression or activity of human functions are also as the second of activity of human functions are also as the second of activity of human functions are also as the second of activity of human functions are also as the second of activity of human functions are also as the second of activity of human and a second or activity of human functions are also as the second of a second or activity of the second of the second or activity of the second or activity of the second or activity of clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are

Gaps ·. 4; Indels 0; Mismatches 20; Conservative Query Match Matches

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(first entry) 14-OCT-2003 ACK27269; DXXXI

ACK27269 standard; DNA; 25

RESULT 11: ACK27269/4

New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; Human microarray DNA oligonucleotide SEQ ID NO 127250. sequence or specific mutations of any gene. Claim 1; SEQ ID NO 127250; 9pp; English. 16-MAR-2001; 2001US-0276759P. 15-MAR-2002; 2002US-00098263 cross-species comparison. (AFFY-) AFFYMETRIX INC WPI; 2003-567953/53. US2003104410-A1. Homo sapiens Mittmann MP; 05-JUN-2003

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, an analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target of more nucleic acids to a least two or more nucleic acid probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring pene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Bach of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dot-blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at segdata.uspto.goc/seguence.html data for this patent can also be

ö 1.0%; Score 17.6; DB 1; Length 25; 33.3%; Pred. No. 2.6e+02; ve 0; Mismatches 4; Indels Sequence 25 BP; 8 A; 4 C; 5 G; 8 T; 0 U; 0 Other; 83.3%; Query Match 1.0 Best Local Similarity 83.3 Matches 20; Conservative

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794 TIACGCTACATGACATTATCCACA

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Gaps

TTATGCGACATGACATTGTTCACA 2 BP ACI83994 standard; DNA; 25 ACI83994; RESULT 114 ACI83994/ EXHXAXD 셤

Human microarray DNA oligonucleotide SEQ ID NO 83985. 14-OCT-2003 (first entry)

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The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and/or amount specifically of hOBMLP proteins, as specific blomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                 New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
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                                                                                                                      2001WO-US000663.
2001WO-US000664.
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2001WO-US000668.
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30-JAN-2001; 2
05-FEB-2001; 2
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30-JAN-2001; 2
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30-JAN-2001; 2
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                                    27-SEP-2000;
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Shannon ME;

Chen W,

Rank DR,

Gaps ö / Match 1.0%; Score 17.6; DB 1; Length 25; Local Similarity 83.3%; Pred. No. 2.6e+02; nes 20; Conservative 0; Mismatches 4; Indels Sequence 25 BP; 2 A; 12 C; 4 G; 7 T; 0 U; 0 Other; Query Match Matches

556 CTCAGCCGCCCTCCGTCGTGTC 579 crearcercescrearesist 24

BP

ABV82337 standard; DNA; 25

ABV82337/

(first entry) 03-JAN-2003 ABV82337;

Human HTPL scanning oligonucleotide SEQ ID 3583.

Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;

Human HTPL scanning oligonucleotide SEQ ID 3580.

03-JAN-2003 (first entry)

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The present invention relates to human testis expressed Patched like protein (HTPL, see ABY78759 to ABY78762 and ABB98519 to ABB98520). HTPL brotein (HTPL, see ABY78759 to ABY78762 and ABB98519 to ABB98520). HTPL brotein (HTPL, see ABY78759 to ABY78762 and ABB98519 to ABB98520). HTPL chas two isoforms, with a few single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ call development, and the HTPL gene was mapped to human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in the such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and such disorder bone marrow, brain, kidney, lung, placenta, prostate, skeletal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potential therapeutic acids are assemble from the infertility and cancer. The present oligomucleotide was used in an example from the present oligomucleotide was used in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
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2001WO-US000667
2001WO-US000667
2001WO-US000668
2001WS-US000668
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                                                                                     Homo sapiens
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; ch 1.0%; Score 17.6; DB 1; Length 25; 1 Similarity 83.3%; Pred. No. 2.6e+02; 20; Conservative 0; Mismatches 4; Indels 216 AGGCCTGGATGAGAGTGGTGG 239 24 AGGCCAGGATGTTAGTGATGGTGG 1 ABV82334 standard; DNA; 25 BP Best Local Similarity ABV82334; Query Match Matches ABV82334/ a BXXXXX à

Sequence 25 BP; 6 A; 11 C; 2 G; 6 T; 0 U; 0 Other;

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example from the invention

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                                                                                                                                                                            This oligonucleotide was designed to amplify the region of homology in the kinase domains of PDGF receptor, HER2, HER3, FGF-FLG, FGF-BEK, insulin receptor and IRR. It was used with another kinase homology domain -based primer (see AAV05314) in the amplification of human LIM-kinase 1 (LIMX1) sequences. The LIMX1 game is composed of 16 exons (see AAV05315 and AAT99599-T99629) and is located 15.4 kb 3' of elastin in chromosome
                                                                                                                                                                                                                                                          the LIMK1
                                                                                                 Diagnosing Williams syndrome cognitive profile from hemi-zygosity of LIMX1 - gene on chromosome 7 encoding new kinase, allowing differentiation from classic Williams syndrome and supra-vascular aortic
                                                                                                                                                                                                                                             7. It encodes a novel protein kinase (see AAW46576). Williams syndrome cognitive profile (WSCP) is detected by determining zygosity of the LIV locus, with hemizygosity being indicative of impaired visuo-spatial constructive cognition. Chromosome 7 deletion analysis allows discrimination between WSCP, SVAS (supra-vascular aortic stenosis) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                     1 GACTTTGGGCTGGCTCGAGACATG 24
                                                                                                                                                        Example 3; Page 22; 62pp; English.
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21-SEP-2000; 2000US-023468TP.
24-SEP-2000; 2000US-0236359P.
04-OCT-2000; 2000GB-00024263.
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30-JAN-2001; 2001WO-US000664.
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2001WO-US000667.
           96US-00678039.
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                                                       Keating MT, Morris CA;
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Best Local Similarity
                                                                            WPI; 1998-101185/09
                                                                                                                                                                                                                                                                                                          Williams syndrome
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           10-JUL-1996;
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                                                                                                                                    stenosis.
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ABN15302
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used as immunogens to raise antibodies that specifically recognise homologue and or amount specifically recognise homologue and/or amount specifically of homologue proteins, as specific biomolecule capture probes for surface-enhanced last described in ionisation, as therapeutic supplement in patients having specific deficiency in homolocule production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding homolocule may be used for diagnosing a disorder associated with the expression of homolocule, in particular heart and skeletal muscle disorders. homologuer used in the screening of the homolocule sequence represents an oligomer used in the screening of the homolocule associated for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a human genome-derived myosin-like protein and polynuclectide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
                                                                                                                                                                                                                                                                                                                                                                                                                                   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
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                                                                                                                                                                                                                                                                                Hanzel DK, Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 15294; 214pp; English.
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30-JAN-2001; 2001WO-US00669.
30-JAN-2001; 2001WO-US00670.
05-FEB-2001; 2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             83.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-MAY-2002 (first entry)
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Matches 20; Conservative
                                                                                                                                                                                                                                                                                Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-179446/23.
                                                                                                                                                                                                       (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200192524-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-DEC-2001
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This invention relates to a novel method for generating histocompatible tissues for transplantation and cell therapy using nuclear transplantation cloning. Specifically, it refers to producing tissue engineered constructs with a desired genetic type, which comprises contacting either the inner cell mass, morula, embryonic stem (ES) cell, adult stem cell or desired differentiated cell with a matrix that adult stem cell or desired differentiated cell with a matrix that call therapy. The present invention describes a method of therapeutic cell therapy. The present invention describes a method of therapeutic cloning transgenic mammalian tissue, preferably human. As such, it can be used for the treatment of cancer, burns, heart disease, diabetes, AIDS, liver, skin or corneal disease, as well as spinal cord injury, multiple sclerosis and reproductive or auditory dysfunction. Accordingly, these scherosisticns exhibit cytostatic, dermatological, vulnerary, immunosuppressive, nootropic, antidiabetic, hepatotropic and nemplify AQPI cDNA for tubule tissue of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                             Producing tissue engineered constructs having a desired genetic type for treating cancer, etc., comprises contacting the inner cell mass, morula, embryonic stem (ES) cell, stem cell, or desired differentiated cell with
dermatological; vulnerary; immunosuppressive; nootropic; antidiabetic; hepatotropic; neuroprotective; AQP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nuclease resistant antisense oligo NBT 55 targeted against parB gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 1.0%; Score 18; DB 1; Length 26; Best Local Similarity 80.8%; Pred. No. 2.2e+02; Matches 21; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 26 BP; 8 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                (ADCE-) ADVANCED CELL TECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 34; 54pp; English.
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                                                                                                                                                                      23-MAY-2003; 2003WO-US016424.
                                                                                                                                                                                                          23-MAY-2002; 2002US-0382386P.
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                                                                                                                                                                                                                                                                                                                       WPI; 2004-035122/03.
                                                                                             WO2003100011-A2.
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                                                                                                                                  04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV21840;
                                                                                                                                                                                                                                                                                                                                                                                                                    a matrix
                                                                                                                                                                                                                                                                                     anza R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 107
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This antisense oligonucleotide is nuclease resistant and can be used in the treatment of animals, including humans, having a bacterial infection. The treatment comprises administration of such nuclease resistant oligonucleotides, targeted to a nucleic acid or protein of the bacterium, and formulated with a carrier. A compound comprising this nuclease cresistant oligonucleotide can be covalently linked to an antibiotic. The method is used to treat infections by a wide variety of Gram-positive and Gram-negative, or acid-fast, bacteria, in human and veterinary medicine. The methods are particularly used in immuno-compromised individuals (e.g. patients with acquired immunodeficiency syndrome or those receiving chemotherapy or radiation therapy), optionally in combination with, or therapeutic use, the oligonucleotides can be used to control bacteria in taboratory cultures, foods, beverages and industrial processes. The oligonucleotides are specific for bacteria, without affecting metabolism con mammalian cells. They may also activate Rhase H and have a general, one specific immune-stimulating effect. The oligonucleotides can be administered orally, intranasally, rectally, topically or by injection, and an agent (e.g. carbohydrate or polyamine) that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Williams syndrome cognitive profile; WSCP; cognition; LIM-kinase 1; LIMK1 gene; supra-vascular aortic stenosis; protein kinase; human; PCR;
                                                                                                                                                                                                           Treating bacterial infections in humans or animals with oligo:nucleotide(s) - resistant to nuclease and targetted to bacterial nucleic acid or proteins, also conjugates of these oligo:nucleotide(s) with antibiotics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.0%; Score 17.8; DB 1; Length 24; 90.5%; Pred. No. 2.3e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 24 BP; 2 A; 6 C; 5 G; 11 T; 0 U; 0 Other;
                                                                                                         (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1435 GAGGATGCCATGAACATCCA 1455
                                                                                                                                                                                                                                                                                                          Claim 49; Page 83; 163pp; English.
                                                                                                                                             Thompson TL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGAAGGCCATGAAACATCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97WO-US011687.
                                  97WO-US012961
                                                                      96US-00685575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kinase domain 5' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV05313 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 90.5%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-JUL-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    enhances cellular uptake
                                                                                                                                             Dale RMK,
                                                                                                                                                                                WPI; 1998-120687/11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-JUL-1997;
                                  23-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9801740-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JAN-1998.
29-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    primer; ss.
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                                                                                                                                             Arrow A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 108
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ID AAV0
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The sequence represents a human mammary gland enriched chemokine (MEC) PCR primer. The primer was used in the invention to amplify the coding region of MECR. The invention relates to a novel method for regulating a tumour or adverse bodily reaction, comprising providing a therapeutic composition having a mammary gland chemokine polypeptide. The polypeptide of the invention has cytostatic and antiinflammatory activity. The method of the invention is useful for regulating a tumour or adverse bodily reaction. The invention also provides a method useful for detecting a tumour using a probe comprising the polymolectide or an antibody to the MEC. The adverse bodily reactions include cancer and inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Determining the presence of neoplastic molecular markers, by identifying the presence of markers in host test sample using array of neoplastic molecular marker specific reagents and analyzing the array of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; cancer; neoplastic disease; tumour specific marker; cytostatic; transcription factor; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                      ·.
                                                                                                                                                                                                                                                             1.1%; Score 18.6; DB 1; Length 27; 84.0%; Pred. No. 1.8e+02; Live 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.0%; Score 18.2; DB 1; Length 27; ilarity 87.0%; Pred. No. 2.1e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 27 BP; 3 A; 11 C; 9 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                        Sequence 27 BP; 5 A; 7 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human SHH gene PCR primer SEQ ID NO: 289.
                                                                                                                                                                                                                                                                                                                                             941 GCCTGGCCTACTGCCACCGGCAGAA 965
                                                                                                                                                                                                                                                                                                                                                                              GCCTGGCCTACTGGCACTGACAGCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 19; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-NOV-2000; 2000US-0249508P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABT03768 standard; DNA; 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 84.0
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CEMI-) CEMINES LLC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-537346/57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-SEP-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABT03768;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 reagents.
                                                                                                                                                                                                                                                                                                                                                                                56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Palm K;
                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 104
ABT03768
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The present invention provides methods and compositions for supplementing or replacing a damaged organ such as kidney, heart, liver, spleen, pancreas, bladder, ureter and urethra. The present sequence is AQPI CDNA amplifying PCR primer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New tissue-engineered construct comprising differentiated cells on a three-dimensional biocompatible scaffold, and at least one physiological function of the organ, useful for supplementing or replacing a damaged
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                         Kidney; heart; liver; spleen; pancreas; bladder; ureter; urethra;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.0%; Score 18; DB 1; Length 26;
80.8%; Pred. No. 2.26+02;
...marrhes 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primer 1 used to amplify AQP1 cDNA for tubule tissue.
                                                                                                                                                                                                                                         organ transplant; immunosuppressive; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 26 BP; 8 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1287 CATCCTGTCCAACGAGGAGTTCAAGA 1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCATGCCCAGCGACGAGTTCAAGA 26
943
                          25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example; SEQ ID NO 9; 25pp; English.
                                                                                                                                                                                             AQP1 cDNA amplifying PCR primer #1.
921 CCTGTTCCAGCTGCTCCGTGGCC
                 CCTGCTCCAGGTGCACCGTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
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15-MAR-2002; 2002US-0364863P.
                                                                                                                                                                                                                                                                                                                                                          04-FEB-2003; 2003US-00358077.
                                                                                                     ADG47704 standard; DNA; 26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-MAY-2004 (first entry)
                                                                                                                                                                11-MAR-2004 (first entry)
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Best Local Similarity 80.8
Matches 21; Conservative
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                                                                                                                                                                                                                                                                                                 JS2003180268-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                     (ATAL/) ATALA A
                                                                                                                                                                                                                                                                     Unidentified
                                                                                                                                                                                                                                                                                                                              25-SEP-2003
                                                                                                                                    ADG47704;
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                                                                         RESULT 105
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Query Match Best Local Similarity Matches 20; Conserv

Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL. Example 2; Page 533; 718pp; English

The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shares an overall structure organisation with the Patched protein. The shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome loppi2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorders sinclude disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention

Sequence 25 BP; 7 A; 11 C; 2 G; 5 T; 0 U; 0 Other;

Gaps ·, 1.1%; Score 18.6; DB 1; Length 25; 84.0%; Pred. No. 1.7e+02; Live 0; Mismatches 4; Indels 216 AGGCCTGGATGAGAGTGGTGGT 240 21; Conservative Similarity Query Match Local Matches

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AGGCCAGGATGTTAGTGATGGTGGT 1

ACK02038 standard; DNA; 25 cross-species comparison 14-OCT-2003 ACK02038; RESULT 102 ACK02038/c

(first entry)

BP.

Human microarray DNA oligonucleotide SEQ ID NO 102019.

EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;

Homo sapiens

US2003104410-A1

05-JUN-2003.

15-MAR-2002; 2002US-00098263.

16-MAR-2001; 2001US-0276759P.

(AFFY-) AFFYMETRIX INC

Mittmann MP

WPI; 2003-567953/53.

New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.

Regulating tumor or adverse bodily reaction, involves providing therapeutic composition comprising a mammary gland chemokine, and providing the composition to the tumor or to the area of adverse

Disclosure; Page 5; 11pp; English

reaction

Bhatia U;

Labow MA, Mickanin CS,

WPI; 2002-187776/24.

Claim 1; SEQ ID NO 102019; 9pp; English

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in manitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic acid probes are specifically designed for analysis compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dotor blot hybridisation to identify or detect the sequence or specific or mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones of mucleic acid probes incorporated in the microarray. Note: The sequence chara for this patent can also be obtained in electronic format directly contactly contactly and sequence or the sequence of the nucleic acid probes incorporated in the microarray. Note: The sequence ö tumour; cancer; ss. Gaps . 0 1.1%; Score 18.6; DB 1; Length 25; 34.0%; Pred. No. 1.7e+02; Indels Human; MEC; mammary gland enriched chemokine; chemokine; cytostatic; antiinflammatory; inflammation; PCR; primer; Human mammary gland enriched chemokine PCR primer #3. Sequence 25 BP; 5 A; 8 C; 5 G; 7 T; 0 U; 0 Other; 0; Mismatches 391 TCGGATGAGGTGCAGTCTCCAGTGA 415 25 TAGGATGAGGTGCACCCTCAAGTGA 1 ABA99028 standard; DNA; 27 BP 21-MAR-2001; 2001US-00813492 23-MAR-2000; 2000US-0191654P 84.0%; 20-MAY-2002 (first entry) Local Similarity 84.03 nes 21; Conservative (LABO/) LABOW M A. (MICK/) MICKANIN C S. (BHAT/) BHATIA U. US2002009735-A1. Homo sapiens 24-JAN-2002. ABA99028; Query Match RESULT 103 ABA99028/c Matches %\$QQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQQ ò g

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              I can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates on provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser description ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 herapeutic supplement in patients having specific deficiency in hGDMLP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and
                                                                                                                                                                                                                             production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
polynucleotide sequences of hGDMLP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
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  protein 1 (hGDMLP-1). The protein and
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Best Local Similarity
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23-MAY-2001;
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The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL constraints, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL codon shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is comportant in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10pl2.1 HTPL and it for diagnosing a disorder caused by mutation in HTPL, and in chromosome 10pl2.1 HTPL and it for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and codetal liver, bone matrow, brain, kidney, placenta, prostate, codetal liver, bone matrow, brain, kidney, placenta, prostate, codetal liver, bone matrow, brain, kidney, placenta, prostate, codetal muscle or colon function. HTPL proteins and nucleic acids are colinicatly undergenere. The present oligonucleotide was used in an anamale from the
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for treating subjects having defects in HTPL.
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0; Mismatches
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                                       Example 2; Page 533; 718pp; English.
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30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
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Best Local Similarity 84.0'
Matches 21; Conservative
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Homo sapiens
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27-SEP-2000;
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30-JAN-2001;
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                                                                                                                                                                                                                                                                                                                  RESULT 99
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                                                                                                                                                                           The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its cerfect match, perfect mismatch, antisense match or antisense mismacch. Also disclosed is a method of gene expression analysis. The array is used in analysis of genetic variation or in hybridisation to a DNA library, or in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target sequence. The method of analysis comprises of at least one target sequence. The method of analysis comprises of hybridising at least one or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the concleic acids further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence. The array of nucleic acid concleic acids further comprises a tag sequence. The array of nucleic acid concleic acid dentify or detect the sequence or specific or mutations of any gene, in mapping the 5' termin of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones or containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the concleic acid probes incorporated in the microarray. Note: The sequence or profectly form these parts of an also be obtained in electronic format directly
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                                                                                            New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
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                                                                                                                                                   Claim 1; SEQ ID NO 39568; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1256 TAGGAACCCCAACTGAGGAGAC 1277
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          (AFFY-) AFFYMETRIX INC
                                                                 WPI; 2003-567953/53
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                                        Mittmann MP;
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                                                                                                                                          The present invention relates to probes which can be used for the measurement of an enzyme. The probes can be used for the measurement of an enzyme participating to the first phase reaction of drug metabolism. The present sequence is a probe shown in the invention
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to the first phase reaction of it.
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                   Sequence 28 BP; 7 A; 9 C; 6 G; 6 T; 0 U; 0 Other;
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        Measurement of an enzyme participating drug metabolism, a probe and a kit for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7 AGTACCTGGACAAGGATCTGTA 28
                                                                                         Claim 4; Page 20; 36pp; Japanese.
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2001WO-US000669.
2001WO-US000670.
2001US-0266860P.
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                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 90.94
Matches 20, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAY-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-179446/23.
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30-JAN-2001;
30-JAN-2001;
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16-MAR-2001; 2001US-0276759P.
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1. .5
/*tag=
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                                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                 WPI; 2004-081710/08
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                                                                                           US2004005567-A1
modified base
                                        modified base
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                                                                                                               08-JAN-2004
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                                                                                                                                                                                               Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
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                                                                                                                                                                                                                                                                                                                       The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4. specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonucleotide is useful for preparing dependent kinase 4. The antisense oligonucleotide is useful for preparing disorder, e.g., cancer. This sequence represents a human cyclin dependent kinase 4 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/mote= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
                                                                                 /note= "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides"
                                        -O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic, antidiabetic; antiinfertility; gene therapy; cyclin-dependent kinase 4; diabetes; infertility; hyperproliferative disorder; cancer; antisense technology; human; ss.
                                                                                                                                                                                                                                                  New antisense oligonucleotide, having a sequence targeted to a nuclei
acid encoding cyclin-dependent kinase 4, useful for preparing a
composition for treating diabetes, infertility or hyperproliferative
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                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 180; 90pp; English.
 are 5-methylcytidines"
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                           /mod_base= OTHER
/note= "OTHER= 2'-
15, .20
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                                                               /*tag= c
/mod_base= OTHER
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                                                                                                                                                                                                          Dobie KW
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                      /*tag=
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                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                          Dean NM, Freier SM,
                                                                                                                                                                                                                             WPI; 2004-081710/08
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Best Local Similarity
                                                                                                     US2004005567-A1
          modified base
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The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonucleotide is useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a human cyclin dependent kinase 4 antisense oligonucleotide.
/mod_base= OTHER
/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
15. .20
                                                                                                             /*tag= c
/mod_base= OTHER
/note= "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotide, having a sequence targeted to a nucle; acid encoding cyclin-dependent kinase 4, useful for preparing a composition for treating diabetes, infertility or hyperproliferative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.1%; Score 19; DB 1; Lv (00.0%; Pred. No. 1.1e+02;
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Best Local Similarity 100.
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [1] which cleaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule [11] comprising a promoter operably linked to a nucleic acid segment encoding [1]. [1] can have antipsoriatic, attistickling, certacological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. [1] can be used in gene therapy. [1] and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinal detechment, and for treating and preventing province or prematurity and retinal detechment, and for treating and preventing contactions and contacting and preventing and contacting and preventing and contacting and preventing and contacting an
                                                                                                                                                                                                                                                                                                                                                         Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or hypertrophic burn
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   scarring such as keloid, adhesion and hypertrophic or hyperscar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention
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100.0%; Pred. No. 1.1e+02;
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Matches 19; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 105; 408pp; English.
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/mod_base= OTHER
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                                                                              26-OCT-2000; 2000WO-US029500.
                                                                                                                                      99US-0161532P.
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                                                                                                                                                                                                                                                                                                       WPI; 2001-300427/31.
                                                                                                                                                                                           (IMMU-) IMMUSOL INC
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                                                                                                                                                                                                                                               Robbins JM,
                                                                                                                                      26-OCT-1999;
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                       03-MAY-2001
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                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER //note= "OTHER= Phosphorothioate backbone. All cytidines
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cyclin-dependent kinase 4; diabetes; infertility;
hyperproliferative disorder; cancer; antisense technology; human; 8s.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein kinase 1 DNA specific PCR probe. This sequence is used illustrate the method of the invention
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100.0%; Pred. No. 1.1e+02;
ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                   /note= "TAMRA labelled"
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                                 /mod_base= OTHER
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                                                                                                                                                                                            07-DEC-2001; 2001US-00017621
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                    /*tag= b
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Best Local Similarity 100.0
Matches 19; Conservative
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                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                  Roach MP;
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                                                                                                                                                                                                                                                                                                                                                                                           thrombocytopenia
                                                                                      WO2003049691-A2
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modified_base
modified_base
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                                                                                                                                                                                                                                                                  Freier SM,
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid melecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, copthalmological, cytostatic, antiseborrheic, antidiabetic, antisickling, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, copathalmological, vulnerary, keratolytic and vincide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as positiasis, atopic dermaticis, actinic keratosis.

Squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, virreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing carring such as keloid, adhesion and hypertrophic or hypertrophic burn the scarring such as keloid, adhesion and hypertrophic or hypertrophic burn the
                                                                                                                                                                                                                                                                                                      Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.1%; Score 19; DB 1; Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Pred. No. 1.1e+02; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            scar. AAH57577 to AAH62099 represent sequexemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 105; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1029 GGCTGACTTTGGCCTGGCC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGCTGACTTTGGCCTGGCC 19
                       26-OCT-2000; 2000WO-US029500.
                                                                              99US-0161532P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                          Tritz R;
                                                                                                                                                                                                                                               WPI; 2001-300427/31.
                                                                                                                                   (IMMI-) IMMISOF INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
nes 19; Conserv
                                                                              26-OCT-1999;
                                                                                                                                                                                          Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CNK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                    Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:465.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.1%; Score 19; DB 1; Length 19;
100.0%; Pred. No. 1.1e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 19 BP; 1 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Barber JR, Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 53; 109pp; English.
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cdk4 ribozyme binding site #59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAH58041 standard; DNA; 19 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-412314/35
                                                                                                                                                                                                                                                                                                                                                                                             (IMMO-) IMMOSOF INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
es 19; Conserv
                                                                                                                                                                   WO200032765-A2
                                                                                                                                                                                                                                                                                                                                         04-DEC-1998;
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                                                                                                              Mammalia.
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Best Loca Matches

RESULT 92

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Gaps

0;

Indels

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Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoritasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MWP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:464.
BP
                                                                                                                                                                                                                                                                                                                                        retinopathy; ss.
AAH58040 standard; DNA; 19
                                                                             10-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200130362-A2
                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                      sickle cell
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WO200130362-A2

Synthetic

03-MAY-2001

Sequence 29 BP; 10 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

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in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target sequence. The method of analysis comprises nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dottor hybridisation to identify or detect the sequence or specific autations of any gene, in mapping the 5° termini of mRNA molecules by primer extensions of any gene, in screening segments of DNA that have been solones for additional subclones containing segments of DNA that have been nucleic acid probes incorporated in the microarray. Note: The sequence date from USPFO at seqdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Primer-2 for identification of SA responsive element in AOPRT-L promoter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inducible promoter; Thaumatin-like PR-5 related gene; AoPRT-L; primer; non-phytoxic inducing agent; Salicylic acid; SA; BTH; environmental; developmental; GUS construct; multimerisation; SA responsive element; systemic activation; Inverse PCR; IPCR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.1%; Score 19.2; DB 1; Length 25; 87.5%; Pred. No. 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 25 BP; 4 A; 8 C; 5 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       686 ACAACCTIGIGGCACTCAAGGAGA 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 ACAACCTTGTGGAACTGGAGAGA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ29517 standard; DNA; 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 89
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The present DNA sequence is a PCR primer-2, used for the identification and multimerisation of a salicylic acid, SA/BTH responsive element in the AOPRT-L promoter region. This primer is designed to regions of AOPRT-L promoter and used along with PCR primer-4 for the construction of GUS
                                                                                                                                                                                                                                                                                   Novel promoters used to control the expression of heterologous genes in
                                                                                                                                                                                                                                                                                                                 Example 12; Page 40; 67pp; English.
                                                                                                                                                                                                    98GB-00013345.
                                                                                                                                                                                                                                            Paul W;
                                                                                                                                                                                                                       (BIOG-) BIOGEMMA UK LID
                                                                                                                                                                                                                                           Draper J, Kenton P,
                                                                                                                                                                                                                                                               WPI; 2000-106107/09
                                                                                                                                                                                                                                                                                             transformed plants.
                                                                                                                                                                                21-JUN-1999;
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Eusion constructs

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1. PCNA and Cyclin B1.
Representative examples of ilbozyme recognition sites are given in AAA82115 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                    Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New hairpin and hammerhead ribozyme for inhibiting restenosis, cleave RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin BI.
                             Gaps
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0
1.1%; Score 19.2; DB 1; Length 29; 87.5%; Pred. No. 1.5e+02;
                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.1%; Score 19; DB 1; Length 19; 100.0%; Pred. No. 1.1e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Robbins JM;
                           0; Mismatches
                                                       596 GCTTTGGGAAACTGGAGACCTACA 619
                                                                                  29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 53; 109pp; English
                                                                               GCTTTTGGAAACTGAATACCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1029 GGCTGACTTTGGCCTGGCC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tritz R, Welch PJ, Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCTGACTTTGGCCTGGCC 19
                                                                                                                                                                                                                                        cdk4 ribozyme binding site #60.
                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA82878 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                  99WO-US028772
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                                                                                                                                                       AAA82879 standard; DNA; 19
                                                                                                                                                                                                             (first entry)
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             Local Similarity 87.5
hes 21, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                         (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-412314/35
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                          WO200032765-A2.
                                                                                                                                                                                                                                                                                                                                                                                  06-DEC-1999;
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                                                                                                                                                                                                             04-DEC-2000
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                                                                                                                                                                                   AAA82879;
Query Match
                                                                                                                                                                                                                                                                                                Mammalia
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                           Matches
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                                                                                                                                        AAA82879
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coupled to an exogenous promoter; is at least 30 contiguous bases of a sequence of 2556 bp, fully defined in the specification and is attached to a solid support; is the 2556bp polymucleotide or its modified form; or is a sequence of 2367 bp, fully defined in the specification; a recombinant cell comprising the recombinant nucleic acid, where the cell comprises an RNA polymerase recognised by the promoter; a recombinant cell made by introducing into a murine callular genome a recombinant nucleic acid encoding at least 20 contiguous amino acids of the 851 amino acid protein; a purified antibody preparation comprising an antibody that selectively binds to the polypeptide over the human disrupted-in-schizophrenia 1 polypeptide; a recombinant mouse comprising an alteration in an allele encoding a polypeptide over the human disrupted-in-schizophrenia a polypeptide, where the alteration substantially reduces or increases full length expression of the polypeptide from the polypeptide by contexting the Disc1 polypeptide with the compound; and measuring the ability of the compound to bind to the Disc1 polypeptide. The disrupted-in-schizophrenia 1 protein has neuroleptic, nootropic, and neuroprotective activities. The Disc1 polypeptides are useful for treating sections and neurophymenia major mental linesses, schizophrenia schizophren
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disorders or unipolar disorders. This polynucleotide sequence represents a splice donor site of the disrupted-in-schizophrenia 1 (Disc 1) gene of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention
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Gaps
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0
                               1.1%; Score 19.8; DB 1; Length 24;
11.3%; Pred. No. 94;
ve 0; Mismatches 2; Indels
G; 2 T; 0 U; 0 Other;
                                                                                              230 GTGGTGGTGGTGCGCAGTGAC 252
                                                                                                                      GIGGIGGIGGIGGCGCGCGCGAC 2
 Sequence 24 BP; 4 A; 14 C; 4
                                                91.3%;
                                                               21; Conservative
                                                 Local Similarity
                                                                                                                            24
                                  Query Match
                                                                Matches
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Human microarray DNA oligonucleotide SEQ ID NO 51207.
                                                                                                          ACI51216 standard; DNA; 25 BP
                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cross-species comparison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EST; ss; probe;
genetic variatic
                                                                                                                                                                                                                                                                                                     13-OCT-2003
                                                                                                                                                                                                     ACI51216;
RESULT 87
ACI51216/C
ID ACI5:
XX
AC ACI5:
XX
DT 13-0
XX
DT 13-0
XX
DY BST;
WW COS
XX
XX
COS
PN US20
XX
PN US20
PN US20
XX
PN 16-P
XX
PN US20
P
               87
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probe; expressed sequence tag; microarray; gene expression; variation; biallelic marker; polymorphism; human; US2003104410-A1. Homo sapiens.

05-JUN-2003.

15-MAR-2002; 2002US-00098263.

16-MAR-2001; 2001US-0276759P.

(AFFY-) AFFYMETRIX INC

Mittmann MP;

WPI; 2003-567953/53.

New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.

Claim 1; SEQ ID NO 51207; 9pp; English.

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its

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perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dotblot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termin of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used
                                                                                                                                                                                                                                                                                                                                                        for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.1%; Score 19.2; DB 1; Length 25; 87.5%; Pred. No. 1.3e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human microarray DNA oligonucleotide SEQ ID NO 51208.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 25 BP; 5 A; 8 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence or specific mutations of any gene.
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ID ACI51217 standard; DNA; 25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 87.5
les 21; Conservative
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsonias, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues: It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targeted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention

Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72; 0; Indels / Match Local Similarity 100.0%; Pred. No. /4/ 958 CGGCAGAGGTGCTACACCG 977 Query Match Best Loc Matches

CGCCAGAAGGTGCTACACCG 1 20 g

ADK17439 standard; DNA; 24 BP ADK17439; ADK17439, RESULT

(first entry) 06-MAY-2004

Disrupted-in-schizophrenia 1 (Disc 1) splice acceptor site of exon 15. disrupted-in-schizophrenia 1; Disc 1; RNA polymerase; neuroleptic; nootropic; neuroprotective; gene therapy; schizophrenia; major mental illness; schizoaffective disorder; bipolar disorder;

Unidentified

WO2003099995-A2

20-MAY-2003; 2003WO-US015741.

24-MAY-2002; 2002US-0383191P.

(MERI) MERCK & CO INC.

Morris JA, Ma L, Liu Y;

WPI; 2004-035115/03

New Disc1 polypeptides, useful for treating schizophrenia, major mental illnesses, schizoaffective disorders, bipolar disorders or unipolar

Disclosure; SEQ ID NO 20; 57pp; English.

The invention relates to a novel purified disrupted-in-schizophrenia 1 (Disc 1) polypeptide comprising at least 8 contiguous amino acids of a sequence of 851 amino acids, fully defined in the specification. The invention further relates to: a recombinant nucleic acid comprising a sequence that either encodes the polypeptide and is transcriptionally coupled to an exogenous promoter, is at least 30 contiguous bases of a sequence of 2556 bp, fully defined in the specification and is attached to a solid support; is the 2556bp polymucleotide or its modified form; or is a sequence of 2367 bp, fully defined in the specification; a

comprises an RNA polymerase recombinant nucleic acid, where the cell comprises an RNA polymerase recombinant cellular genome a recombinant nucleic acid protein; a purified antibod a murine cellular genome a recombinant nucleic acid encoding at least 20 contiguous amino acids of the B51 amino acid protein; a purified antibody preparation comprising an antibody that selectively binds to the polypeptide over the human disrupted-inschizophrenial polypeptide, a recombinant mouse comprising an alteration in an allele encoding a polypeptide, where the alteration substantially reduces or increases full length expression of the polypeptide from the polypeptide by contacting the Discl polypeptide with the compound able to bind to a Discle polypeptide by contacting the compound to bind to the Discl polypeptide. The disrupted-in-schizophrenia | protein has neuroleptic, noctropic, and neuroprotective activities. The Disc | polymucleotide can be used in gene therapy to treat disorders. The polypeptides are useful for treating schizophrenia, major mental illnesses, schizoaffective disorders, bipolar disorders or unipolar disorders. This polynucleotide sequence represents a splice acceptor site of the disrupted-in-schizophrenia 1 (Disc 1) gene

Sequence 24 BP; 4 A; 14 C; 4 G; 2 T; 0 U; 0 Other;

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Gaps

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Gaps .. 0 1.1%; Score 19.8; DB 1; Length 24; 91.3%; Pred. No. 94; 2; Indels 0; Mismatches Best Local Similarity 91.3 Matches 21; Conservative Query Match

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ADK17453 standard; DNA; 24 BP ADK17453/c

ADK17453;

06-MAY-2004 (first entry)

Disrupted-in-schizophrenia 1 (Disc 1) splice donor site of exon 9.

disrupted-in-schizophrenia 1; Disc 1; RNA polymerase; neuroleptic; nootropic; neuroprotective; gene therapy; schizophrenia; major mental illness; schizoaffective disorder; bipolar disorder; unipolar; ss

Unidentified

WO2003099995-A2.

04-DEC-2003

20-MAY-2003; 2003WO-US015741.

24-MAY-2002; 2002US-0383191P.

(MERI) MERCK & CO INC.

Morris JA, Ma L, Liu Y;

WPI; 2004-035115/03.

New Discl polypeptides, useful for treating schizophrenia, major mental illnesses, schizoaffective disorders, bipolar disorders or unipolar disorders

Disclosure; SEQ ID NO 34; 57pp; English.

ø The invention relates to a novel purified disrupted-in-schizophrenia 1 (Disc 1) polypeptide comprising at least 8 contiguous amino acids of sequence of 851 amino acids, fully defined in the specification. The invention further relates to: a recombinant nucleic acid comprising a sequence that either encodes the polypeptide and is transcriptionally

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                  hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentose; X-linked Charcot-Marie-Tooth disease, therapy, mental retardation, Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5, incontinentia pigmenti; phosphorothioate backbone;
                           Gaps
                                                                                                                                                                                         Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
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                                                                                                                                                                       Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204175.
      Length 20
                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 /note = "2'methoxyethyl nucleotides"
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      DB 1;
72;
1.1%; Scor.
100.0%; Pred. No. ...
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                                             269 CACGIGCIGCICCIGGGGAA 288
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                                                                                                                                                                                                                                                                                                                                       methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                   base= OTHER
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                                                           CACGTGCTGCTCCTGGGGAA 1
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                                                                                                              AAL61738 standard; DNA; 20
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                 Similarity
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                                                                                                                                                                                                                                          antisense; ss
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modified_base
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                                                                                                                                                     22-SEP-2003
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                                                                                                                                                                                                                                                                       Synthetic.
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        Query Match
Best Local 9
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                      particularly useful for inhibiting the expression of FCTAIRE protein kinase i in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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/note= "Phosphorothioate backbone; All cytidines are
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or incontinentia pigmenti. The antisense oligonucleotide is
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                                                                                                                                  sequence is used to illustrate the method of the invention
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                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                        Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                 1.1%; Score 20;
100.0%; Pred. No.
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                                                                                                                                                                                                                                                                                                                                                         TGTGGCACTCAAGGAGATCA 712
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les 20; Conserv
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Page 62

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/mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are 5-
     Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcoc-Marie-Tooth disease; therapy; mental retardation; Wiskett-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                                                                                             /not\overline{e}= "2'methoxyethyl nucleotides" 16. .20
                                                                                                                                                                                                                     note= "2'methoxyethyl nucleotides"
                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                               Claim 3; Page 75; 104pp; English.
                                                                                                                                             methylcytidines"
                                                                                                                                                                       mod_base= OTHER
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                                                                       sapiens,
                                                                                                                                                                                                                                                       19-JUN-2003
                                                                      Homo sapie
Synthetic.
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New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or

The invention relates to antisense compounds, compositions and methods for modularing the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinse 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligomucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense eotide targetted to human PCTAIRE protein kinase 1 DNA. This is used to illustrate the method of the invention oligonucleotide

Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

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1715 GCCTGAGCCATGTTCACCTG 1734
                                                                 GCCTGAGCCATGTTCACCTG 1
20; Conservative
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Gaps ·.

1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72; ive 0; Mismatches 0; Indels

Similarity

Query Match Local

Matches

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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                    Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease, therapy, mental retardation; Wiskott-Aldrich syndrome, dystonia, Parkinsonism;
                                                                                                                                                PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                 Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204150.
                                                                                                                                                                                                                                                                                              /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
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                                                                                                                                                                                                              Location/Qualifiers
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                   AAL61713 standard; DNA; 20 BP
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                                                                                                                                                                                         Synthetic.
                                          AAL61713;
RESULT 82
AAL61713/c
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disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a meurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth

Claim 3; Page 74; 104pp; English.

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/mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
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                                       Location/Qualifiers
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                                                                                                                                                                                                         /mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       thrombocytopenia.
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Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for modulating the expression of PCTAIRE protein Kinase 1 (also known as PCTAIRE-1, PTCK1 and CXE). The antisense oligomuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligomuclectide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for disgnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligomuclectide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to antisense compounds, compositions and methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia; retinitis pigmentoas; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
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1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels
                                     /note= "2'methoxyethyl nucleotides"
16. .20
                                                                                                                          /note= "2'methoxyethyl nucleotides
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                                                                                                       base= OTHER
                     /mod base= OTHER
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                                                                                                                                                                    WO2003049691-A2
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTGKI and CTKS). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonuclectide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonuclectide targetted to human PCTAIRE protein kinase 1 DNA. This
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Best Local Similarity 100.
Matches 20; Conservative
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RESULT 80
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or
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/note= "Phosphorothioate backbone, All cytidines are 5-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pignentosa; X-linked Charcoc-Marie-Tooth disease, therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                            New antisense oligonucleotides for modulating PCTAIRE protein kinase gene expression, particularly useful for treating hyperproliferative neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                       Gaps
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Pred. No. 72;
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                                                                                                     Claim 3; Page 74; 104pp; English.
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/mod base= OTHER
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Roach MP;
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                      WPI; 2003-577271/54
                                                                               thrombocytopenia.
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Freier SM,
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methylcytidines"
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                                                                  06-DEC-2002; 2002WO-US039138
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Matches 20; Conserv
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19-JUN-2003
                                                                                                                                                                                                                                                                         Freier SM,
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Example 15; Page 73; 104pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 77
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                disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonuclectides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
  sideroblastic anaemia, X-linked Charcot-Marie-Tooth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human, PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperprolliferative disease; heurological disease; thrombocytopeania, retinitis pigmentosa; X-linked Charcot-Marie-Tocht disease; therapy, mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                             Score 20; DB 1; Length 20;
Pred. No. 72;
                                                                                                                                                                                                                                    0; Indels
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16. .20
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                                                                                                                                                          Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                  1.1%; Scor.
100.0%; Pred. No. '2,
'... 0; Mismatches
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/mod_base= OTHER
'mod_base= oTHER
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                                                                                                                                                                                                                                      Conservative
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Best Local Similarity
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Matches
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and czk5). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperprofilerative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsoniam, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein or sessents or incontinentia pigmenti. The partisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
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. 72;
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100.0%; Pred. No.
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/mod_base= OTHER
/note= "2'methoxyethyl
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Best Local Similarity 100.
Matches 20; Conservative
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New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentoas; X-linked Charcor Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                                                                                                                                                                /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
                                                                                                       PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
                                                                                  Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204181.
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16. .20
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/mod base= OTHER
                                                                                                                                                                                                                                                                      methylcytidines"
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                     AAL61744 standard; DNA; 20 BP.
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                                                                                                                                                                                             Synthetic.
                                          AAL61744;
           AAL61744/c
RESULT 74
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for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.), PTCK1 and crk5). The antisense oligonucleoride is useful for treating an animal having a disease oligonucleoride is useful for protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retradation, Wiskott-Adrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention compositions and methods The invention relates to antisense compounds,

Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'note = "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                                                                                            Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie -Tooth disease, therapy, mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                            Gaps
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             Length 20;
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Thes 20; Conserve
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/mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
                               Human, PCTAIRE protein kinase 1, PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentoses; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crK5; incontinentia pigmenti; phosphorothioate backbone;
Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204162.
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/note= "2'methoxyethyl nucleotides"
16. .20
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                                                                                                                  /note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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100.0%; Pred. No. '...
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20 GACCAGGCTTCAGCCACGTC 1
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or
New antisense oligonucleotides for modulating PCTAIRE protein kinase gene expression, particularly useful for treating hyperproliferative neurological disorders for example, mental retardation, or
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AAL61725 standard; DNA; 20

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(first entry)

22-SEP-2003

AAL61725;

WO2003049691-A2

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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Pred. No. 72;
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for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE
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Roach MP;

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methylcytidines"
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100.0%; Pred. No. '...
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                 Claim 3; Page 74; 104pp; English.
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                                                                                       Local Similarity
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   Sequence 20
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Synthetic.

AAL61751;

AAL61751

499 20

Query Match

Matches

thrombocytopenia

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Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                          Freier SM,
            Synthetic.
           Ношо
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCTA and crks). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention New antisense oligonucleotides for modulating PCTAIRE protein kinase I gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or /mod_base= OTHER /note= "Phosphorothioate backbone; All cytidines are 5hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy, mental retardation; Wiskott-Aldrich syndrome; dystonia, Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204167. /note= "2'methoxyethyl nucleotides" 16..20 /note= "2'methoxyethyl nucleotides" Location/Qualifiers Claim 3; Page 74; 104pp; English. base= OTHER methylcytidines" base= OTHER 07-DEC-2001; 2001US-00017621. 06-DEC-2002; 2002WO-US039138 Ü ಹ Ф /*tag≂ /mod_bag /*tag= (ISIS-) ISIS PHARM INC. Roach MP; /mod WPI; 2003-577271/54. thrombocytopenia. WO2003049691-A2 antisense; ss Key modified_base modified base modified base sapiens. 19-JUN-2003

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/mod_base= OTHER /note= "Phosphorothioate backbone; All cytidines are

methylcytidines'

*tag= p

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Location/Qualifiers

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Key modified_base

/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"

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/*tag=

16. .20

modified base

06-DEC-2002; 2002WO-US039138 07-DEC-2001; 2001US-00017621.

WO2003049691-A2

19-JUN-2003

(ISIS-) ISIS PHARM INC.

Roach MP;

Freier SM,

WPI; 2003-577271/54.

thrombocytopenia.

/mod_base= OTHER /note= "2'methoxyethyl nucleotides"

Human, PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia; retinitis pigmentosa, X-linked Charcoc-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;

antisense; ss.

Homo sapiens.

Synthetic

Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204168.

(first entry)

22-SEP-2003

AAL61731;

AAL61731 standard; DNA; 20 BP.

AAL61731/

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinse 1 (also known as PCTAIRE.), PTKI and ork5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neural disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsoniam, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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Gaps

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0; Indels

Mismatches

1.1., 100.0%; Pre-

Conservative

Local Similarity

Query Match

20;

Matches

ATCCGCCTGCCTGAGGCTA 512

493

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20 Arccecrecercaecera 1

Score 20; DB 1; Length 20; Pred. No. 72;

Score 20;

New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or

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Pred. No. 72;
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                                              /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
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/note= "2'methoxyethyl nucleotides"
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100.0%; Pred. No. /2,
... 0; Mismatches
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methylcytidines'
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                                                                                                   /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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                                                                                                                                                                                        'mod_base= OTHER
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ID AAL61730 standard; DNA; 20
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Best Local Similarity 100.
Matches 20; Conservative
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modified base
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                Homo sapiens.
Synthetic.
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                                                                                              New antisense oligonucleotides for modulating PCTAIRE protein kinase I gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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/note= "2'methoxyethyl nucleotides"
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                                    Roach MP;
                                                                     WPI; 2003-577271/54.
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The invention relates to antisense compounds, compositions and methods for modulating the expression of FOTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCKL and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, PCTAIRE protein kinase 1, PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentose; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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ive 0; Mismatches
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                                                                                  06-DEC-2002; 2002WO-US039138
                                                                                                                    07-DEC-2001; 2001US-00017621
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/*tag= a
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                                                                                                                                                       (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                           Roach MP;
                                                                                                                                                                                                                          MPI; 2003-577271/54.
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                                                                                                                                                                                                                                                                                                                  thrombocytopenia
                WO2003049691-A2
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modified_base
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                                                 19-JUN-2003
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neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonisam, sideroblastic ansemia. X-linked Charcot-Maria-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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                                                                                                                                                                                           1.1%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 72;
tive 0; Mismatches 0; Indels
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16. .20
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                                                                                                                                                               Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;
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/mod_base= OTHER
                                                                                                                                                                                                                                                           14 AAGGATGGACAGGAATGCAG 33
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/mod_base= OTHER
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nes 20; Conservative
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                                                           The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligomucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsoniam, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'note= "Phosphorothioate backbone; All cytidines are 5-
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72;
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16. .20
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                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
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100.0%; Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                            149 GGCAGCTGTCAATGACACTC 168
                              Claim 3; Page 74; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mod_base= OTHER
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ID AAL61721 standard; DNA; 20
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/*tag= b
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Best Local Similarity 100.0
Matches 20, Conservative
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thrombocytopenia
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modified_base
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Length 20; Indels

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22-SEP-2003

AAL61698;

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTGK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a
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16. .20
/*tag= c
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             G; 7 T; 0 U; 0 Other;
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72;
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                                                       1.1%; Score 20;
100.0%; Pred. No.
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/mod_base= OTHER
                                                                                                                                               GCAGCGTAAAGGATGGACAG 25
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                 Sequence 20 BP; 2 A; 8 C; 3
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/*tag= b
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                                                                                                      Conservative
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                                                                                Similarity
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                                                            Query Match
Best Local 9
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AAL61699/c
                                                                                                      Matches
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                                                                                                                                                                                                                                                                          Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; Lhrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; reelinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
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/note= "Phosphorothioate backbone; All cytidines are
                                                                                                                                                                                                                                                                                                                                                                   crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                                                                                                                                                  Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204135.
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/note= "2'methoxyethyl nucleotides"
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20 TGCCACCGGCAGAAGGTGCT 1
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                                                                                                         AAL61698 standard; DNA; 20
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modified base

Homo sapiens. Synthetic.

antisense;

modified base

modified base

19-JUN-2003

Freier SM,

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Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease; therapy, mental reteardation, Wiskott-Aldrich syndrome; dystonia, Parkinsonism, PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                    Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204179.
   22-SEP-2003 (first entry)
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                                                                                                                                                   /note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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Pred. No. 72;
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                                                                                    iocation/Qualifiers
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mod_base= OTHER
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/note= "Phosphorothioate backbone; All cytidines are
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/note= "2'methoxyethyl nucleotides"
16. .20
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Location/Qualifiers
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                                                                                                                                                                      methylcytidines"
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/mod base= OTHER
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AAL61742 standard; DNA; 20

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Claim 3; Page 74; 104pp; English.
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                                       (ISIS-) ISIS PHARM INC.
                                               Roach MP;
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for modulating the expression of PCTAIRE protein kinase 1 date whom as PCTAIRE.1, PTCK1 and crk5). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia. X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are
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/note= "2'methoxyethyl nucleotides"
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Pred. No. 72;
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            /note= "2'methoxyethyl nucleotides"
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100.0%; Pred. No. '..'
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The invention relates to antisense compounds, compositions and methods for andulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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neurological disorders for example, mental retardation, or
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                                                                                                                                                                                                                       New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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ive 0; Mismatches
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protein kinase 1, particularly a hyperproliferative disease
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                         Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease, thrombocytopaenia; retinitis pigmentoses, X-linked Charcot-Marie-Tooth disease, therapy; mental reteardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
                          Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204203.
                                                                                                                                                                                                         /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
                                                                                                                                                                                                                                                     'note= "2'methoxyethyl nucleotides"
                                                                                                                                    Location/Qualifiers
                                                                                                                                                               mod_base= OTHER
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/mod_base= OTHER
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          (first entry)
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                                                                                         antisense; ss
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                                                                                                         Homo sapiens.
         22-SEP-2003
                                                                                                                                                                                                                                                                                       19-JUN-2003
                                                                                                                   Synthetic
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New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.

06-DEC-2002; 2002WO-US039138 07-DEC-2001; 2001US-00017621.

19-JUN-2003

(ISIS-) ISIS PHARM INC.

Roach MP;

Freier SM,

WPI; 2003-577271/54.

Claim 3; Page 75; 104pp; English.

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTCAI and crk5). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anamenia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention

Sequence 20 BP; 6 A; 5 C; 8 G; 1 T; 0 U; 0 Other;

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                           Gaps
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0
 1.1%; Score 20; DB 1; Length 20;
                          Indels
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           100.0%; Pred. No. 72; ive 0; Mismatches
                       20; Conservative
Query Match
Best Local Similarity
            Best Loca
Matches
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcoc-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCXI; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                   Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204139.
                                                                                                                                                                                                                                                                                                             /note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                            'note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                            /mod_base= OTHER
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GCCAGCCTTCGGTCTTCGTC
                                                 AAL61702 standard; DNA; 20
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modified_base
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Synthetic.
                                                                                  22-SEP-2003
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                                                                  AAL61702;
                                 RESULT 50
                                         AAL61702/
ID AAL6:
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Example 15; Page 73; 104pp; English

thrombocytopenia.

New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.), PTCKI and crk5). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonuclectide is bearticularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This

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            /note= "Phosphorothioate backbone; All cytidines are
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                                                                                               /note= "2'methoxyethyl nucleotides
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100.0%; Pred. No. ...
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                                                                               base= OTHER
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mod_base= OTHER
                               methylcytidines"
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        thrombocytopenia.
                                                                                                                                                                                                WO2003049691-A2
                                                  modified base
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for addulating the expression of PCTATRE protein Kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for retating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The persent sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                           /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention relates to antisense compounds, compositions and methods
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PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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Pred. No. 72;
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AAL61766 standard; DNA; 20 BP.
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                                                                                             New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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methylcytidines"
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                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  388 TCCTCGGATGAGGTGCAGTC 407
                                                                                                                                                             Claim 3; Page 74; 104pp; English
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                                                 Roach MP;
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                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                    thrombocytopenia
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                                                Freier SM,
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for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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/mod base= OTHER
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             protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic namemia X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein Kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein Kinase 1 DNA. This sequence is used to illustrate the method of the invention
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Pred. No. 72;
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481 CTACCAGCTGACATCCGGCT

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligomuclecitie is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrone, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Toch disease, or incontinentia pigmenti. The antisense oligomucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                                                              hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease, therapy, mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                                                                                                                                                 Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
                                                                                                                                                                                              Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204192.
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16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'note = "2' methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
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/mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   methylcytidines"
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CTACCAGCTGACATCCGGCT
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                                                                                           AAL61755 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                  antisense; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides for modulating PCTAIRE protein kinase I gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
oligonuclectide targetted to human PCTAIRE protein kinase 1 DNA, This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                               hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                     PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
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                                                                  Length
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6    .20
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                                   Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                                DB 1;
72;
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100.0%; Pred. No. ...
0; Mismatches
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                                                                             Similarity
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                                                                                                                                                                                                                                                               Conservative
                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                   Roach MP;
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                     Synthetic.
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Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentose; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                          Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204166.
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         AAL61729;
                                                                                                                                                                                                                                           Homo
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           The invention relates to antisense compounds, compositions and methods for anoulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE1, PTCX1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsoniam, sideroblastic anaemia, X-linked Charcot-Warie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
antisense; ss.
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/note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
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Pred. No. 72;
0; Mismatches 0; Indels
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/note= "2'methoxyethyl nucleotides'
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                                                                                                                                     Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                    base= OTHER
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/mod base= OTHER /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"

OTHER

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Location/Qualifiers

/mod_base= OTHER
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Roach MP;

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New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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                                                                                                                                                                                                                                Claim 3; Page 74; 104pp; English.
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The invention relates to antisense compounds, compositions and methods for anoulating the expression of PCTAIRE procein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Adarich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotides for modulating PCTAIRE protein kinase l
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
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                                                                      /note= "2'methoxyethyl nucleotides"
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                                     /mod base= OTHER
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Synthetic.
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The invention relates to antisense compounds, compositions and methods for anodulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for reating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocycopeania, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystronia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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               /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
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hyperproliferative disease, neurological disease, thrombocytopaenia,
retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease, therapy;
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                                                 methylcytidines"
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Matches 20; Conservative
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligomucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retradation, wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligomucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinsel in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligomucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention ó 5 New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or Human, PCTAIRE protein kinase 1, PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone; /note= "Phosphorothioate backbone; All cytidines are methylcytidines" Gaps ö Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204208. Score 20; DB 1; Length 20; Pred. No. 72; Indels 'note= "2'methoxyethyl nucleotides" /mod_base= OTHER /note= "2'methoxyethyl nucleotides" Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other; ; 100.0%; Prec. Location/Qualifiers 1465 AGTCTGGGGGAGCGGATCCA 1484 /*tag= c /mod base= OTHER base= OTHER Claim 3; Page 75; 104pp; English 20 AGTCTGGGGGAGCGGATCCA 1 AAL61771 standard; DNA; 20 BP. 06-DEC-2002; 2002WO-US039138 1.1%; (first entry) *tag= p 20; Conservative 16. .20 /*tag= /mod Best Local Similarity thrombocytopenia. WO2003049691-A2

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for disponstics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targeted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                                             New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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100.0%; Pred. No. 72;
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16. .20
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Matches 20; Conservative
                                              (ISIS-) ISIS PHARM INC.
                                                                                  Roach MP;
                                                                                                                  WPI; 2003-577271/54.
                                                                                                                                                                                                        thrombocytopenia.
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/mod_base= OTHER
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gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
  or as research respents or kits. The present sequence is an antisense oligomucleotide targetted to human PCTAINE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "2'methoxyethyl nucleotides
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                                             Sequence 20 BP; 7 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
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reagents or kits. The
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as

Claim 3; Page 74; 104pp; English

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PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1. particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideateoblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are
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                                                                                                                                                                                                                                                                                                                                                                                               AAL61760 standard; DNA; 20
                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.0
Watches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Roach MP;
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modified_base
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    888888888888888888888888888888888
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445 AAGATCTCCACTGAGGACAT

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Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                       06-DEC-2002; 2002WO-US039138
                                                                                                                                              07-DEC-2001; 2001US-00017621
          22-SEP-2003 (first entry)
                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                    WPI; 2003-577271/54.
                                                                                                                                                                                       chrombocytopenia
                                                                                                                       WO2003049691-A2
                                                               Key
modified_base
                                                                                                     modified base
                                             antisense; ss
                                                                                     modified base
                                                    Homo sapiens.
                                                                                                                               19-JUN-2003
                                                                                                                                                             Freier SM,
                                                        Synthetic.
   AAL61726;
                                                                                                                                                                                               Claim
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3; Page 74; 104pp; English.

Roach MP;

note = "2'methoxyethyl nucleotides"

/mod_base= OTHER

/*tag= b

Location/Qualifiers

/*tag= a /mod_base= OTHER

methylcytidines"

/mod_base= OTHER /note= "2'methoxyethyl nucleotides"

U

/*tag=

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1.1%; Scor. 100.0%; Pred. No. '-., '--- 0; Mismatches

Query Match Best Local Similarity 100. Matches 20; Conservative

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTAS and orfs). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a cuerological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                                                                                                                                                                                               Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentoea, X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                                                                                                                                                                       Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204177.
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/note= "2'methoxyethyl nucleotides'
16. .20
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20 AAGAICTCCACTGAGGACAT
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                                                                                                                      AAL61740 standard; DNA; 20 BP
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                      AAL61740;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and CTK5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein can a research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 bna. This sequence is used to illustrate the method of the invention
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                                                                                                 Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia; retinitis pigmentosa; X-linked Charcoch-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
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                                                         Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204163.
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Pred. No. 72;
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New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                 The invention relates to antisense compounds, compositions and methods
                            /note= "Phosphorothioate backbone; All cytidines are
                                                                 /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
                                                                                                               not\bar{e}= "2'methoxyethyl nucleotides"
                                        methylcytidines"
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/mod_base= OTHER
                    mod_base= OTHER
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                                                                                                                                                                                       07-DEC-2001; 2001US-00017621
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/*tag= b
          *tag= a
                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                            Freier SM, Roach MP;
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                                                                                                                                                                                                                                                                                              thrombocytopenia.
                                                                                                                                 WO2003049691-A2
  modified base
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for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and CTK5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or an neurological disease. These diseases include thrombocytopaenia, mental neurological disease. These diseases include thrombocytopaenia, mental with Parkinsonism, sideroblastic anaemia. X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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Pred. No. 72;
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Gaps
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                           0; Indels
           100.0%; Pred. No. 72;
tive 0; Mismatches
Query Match
Best Local Similarity 100.4
Matches 20, Conservative
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1436 AGGATGCCATGAAACATCCA 1455 20 AGGATGCCATGAAACATCCA

AAL61764 standard; DNA; 20 BP AAL61764; RESULT 32 AAL61764,

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Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204201.

22-SEP-2003 (first entry)

Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia;

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The invention relates to antisense compounds, compositions and methods for andulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thromboxycopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystconia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, con as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 bN. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone; antisense; ss.
                                                                                                                                                                    /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
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/note= "2'methoxyethyl nucleotides"
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100.0%; Pred. No. ...
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                                                                                                                                                                                                    methylcytidines"
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AAL61726/c
ID AAL617;
                                                                             Homo
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Best Local Similarity
                            thrombocytopenia.
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modified_base
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                                                                                                                                 Homo sapiens
             Freier SM,
                                                                                                                                    Synthetic.
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modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                                                                                                                                                                          New antisense oligonucleotides for modulating PCTAIRE protein kinase I gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
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/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
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     06-DEC-2002; 2002WO-US039138
                                         07-DEC-2001; 2001US-00017621
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                                                                           (ISIS-) ISIS PHARM INC
                                                                                                             Roach MP;
                                                                                                                                             WPI; 2003-577271/54.
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as pCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in calls or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonuclectides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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                                                                     /note= "2'methoxyethyl nucleotides"
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PCTAIRE.1, PTCK1 and CTK5). The antisense disponselectide is useful for freating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperpoliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental with Parkinsonias, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonuclectide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonuclectide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
 modulating the expression of PCTAIRE protein kinase 1 (also known as
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Pred. No. 72;
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/note= "2'methoxyethyl nucleotides"
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16. .20
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Best Local Similarity 100.0%; Fred. No. 72;
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCAI and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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Matches 20; Conserv
                                                                     thrombocytopenia.
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modified_base
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XW HUMAN,

XW HOMETH

XW PTCKI,

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kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxi or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldarich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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                                                                                                                                                                         Score 20; DB 1; Length 20;
Pred. No. 72;
0; Mismatches 0; Indels
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//note= "2'methoxyethyl nucleotides"
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                                                                                                                           BP; 7 A; 1 C; 8 G; 4 T; 0 U; 0 Other;
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/mod base= OTHER
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Matches 20; Conserv
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hyperproliferative disease; neurological disease;

/mod_base= OTHER /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"

Location/Qualifiers

. 20 *tag=

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'note = "2'methoxyethyl nucleotides"

/mod_base= OTHER

/mod_base= OTHER hoote= "2'methoxyethyl nucleotides" 16. .20 /*tag= c

*tag= b

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense of aligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocycopenia.
              retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy, mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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. 0 sequence is used to illustrate the method of the invention DB 1; Length 20; 72; Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

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Gaps
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Score 20; DB 1; Pred. No. 72; 0; Mismatches
1.12,
100.0%; PIE
                  Conservative
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471 GCGCCTATCACTACCAGCTG 490 GCGCCTATCACTACCAGCTG 1

AAL61753/c RESULT 25

DB 1; Length 20; 72;

1.1%; Score 20; 100.0%; Pred. No.

Query Match Best Local Similarity

Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

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for modulating the expression of PCTAIRE procein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for Treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a retardation, wiskott-Adrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic ansemia. X-linked Charcot-Marie-Tooth disease, or incontinenta pigment. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                       Human, PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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                                                                                           Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204190.
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/note= "2'methoxyethyl nucleotides"
16. .20
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/note= "2'methoxyethyl nucleotides"
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 AAL61753 standard; DNA; 20 BP.
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                               AAL61753;
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/note= "2'methoxyethyl nucleotides"

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Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmentl; phosphorothioate backbone;
                             /note= "2'methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                       1558 TCGTCGATGCCTGACTCAGG 1577
                                                                                                                                                                                                            Claim 3; Page 75; 104pp; English.
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                      /mod base= OTHER
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Best Local Similarity
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(ISIS-) ISIS PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disease, or incontinentia pigmenti. The antisense oligomucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligomucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                 invention relates to antisense compounds, compositions and methods
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Pred. No. 72;
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100.0%; Pred. No. ...
0; Mismatches
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as CC for modulating the expression of PCTAIRE protein kinase 1 (also known as CC treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a control particularly a hyperproliferative disease or a retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia cut harkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigment. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein con as research reagents or kits. The present sequence is an antisense coligonucleotide targetted to human PCTAIRE protein kinase 1 bnA. This sequence is used to illustrate the method of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                      /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
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/note= "2'methoxyethyl nucleotides'
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Location/Qualifiers
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/mod_base= OTHER
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Human PCTAIRE protein kinase 1 antisense oligo, 1818 204202.
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                                                                                                                                                                                                             Claim 3; Page 74; 104pp; English.
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Synthetic.
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Matches
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AAL61765/c
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1.1%; Scor. 100.0%; Pred. No. '.., '.. 0; Mismatches

for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antieense oligomucleotide targetted to human PCTA/RE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsoniam, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein invention relates to antisense compounds, compositions and methods /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines" Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone; Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204205. 1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72; Indels . 0 Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other; 100.0%; Prec. ... Location/Qualifiers 1533 ACAAAAGGAGGCCAGCCTTC 1552 Claim 3; Page 75; 104pp; English. /mod base= OTHER /*tag= b /mod_base= OTHER 20 ACAAAAGGAGGCCAGCCTTC 1 06-DEC-2002; 2002WO-US039138 07-DEC-2001; 2001US-00017621 AAL61768 standard; DNA; 20 (first entry) Query Match Best Local Similarity 100. Matches 20, Conservative ಹ ..20 *tag= WPI; 2003-577271/54. thrombocytopenia. antisense; ss Key modified_base modified base 22-SEP-2003 sapiens Freier SM, Synthetic. AAL61768/c Homo RESULT 22 d ଚ ö The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTCK1 and CTKS). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystconia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This New antisense oligonucleotides for modulating PCTAIRE protein kinase l gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or /mod_base= OTHER /note= "Phosphorothioate backbone; All cytidines are 5-Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease, therapy, mental retardation, Wiskott-Aldrich syndrome, dystonia, Parkinsonism, ·. crk5; incontinentia pigmenti; phosphorothicate backbone; Score 20; DB 1; Length 20; Pred. No. 72; 0; Indels

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'note= "2'methoxyethyl nucleotides"
16. .20

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methylcytidines" /*tag= b /mod_base= OTHER note = "2'methoxyethyl nucleotides"

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particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kite. The present sequence is an antisense oligonucleoride targetted to human PCTAIRE protein Kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "2'methoxyethyl nucleotides"
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as CC for modulating the artisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE CC treating an animal having a disease or condition associated with PCTAIRE CC retardation kinase 1, particularly a hyperproliferative disease or a currological disease. These diseases include thrombocytopaenia, mental creardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is contained in thibiting the expression of PCTAIRE protein contained in this incontinents of the inhibiting the expression of PCTAIRE protein contained as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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/note= "2'methoxyethyl nucleotides"
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Mismatches Pred. No.

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Conservative

100.08;

Best Local Similarity

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methylcytidines"
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    AAL61737 standard; DNA; 20 BP
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GGCAAAAGCAAGCTCACAGA 1
667 GGCAAAAGCAAGCTCACAGA
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/note= "Phosphorothioate backbone; All cytidines are 5-
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                                                                                     Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa, X-linked Charcot-Marie-Toch disease, therapy, mental retardation, Wiskott-Aldrich syndrome, dystonia, Parkinsonism, PTCK1, crk5, incontinentia pigmenti; phosphorothioate backbone;
                                                      Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204174.
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                                                                                                                                                                                                                                                                                                                                                                                                         /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
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                                                                                                                                                                                                                                                                        Location/Qualifiers
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DB 1; Length 20;

1.1%; Score 20;

Sequence

Query Match

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crK5). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is
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                                                                                                                                                                                                                                                                                                                                                                 hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy, mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
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/note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
                                                                                                                                                                                                                                                                                                                              PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                                                                                                                                                       Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204187.
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/note= "2'methoxyethyl nucleotides"
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16. .20
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental neurological disease. These diseases include thrombocytopaenia, mental extensions, wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                    /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
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/note= "2'methoxyethyl nucleotides"
16. .20
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Pred. No.
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as purely and crks). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental neurological disease. These diseases include thrombocytopaenia, mental neurological disease. These diseases include thrombocytopaenia, mental with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in calls or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonuclectides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
Human, PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
                                                                                                                                                                                                                                                       'note = "Phosphorothioate backbone; All cytidines are
                                                                      PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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100.0%; Pred. No. 72;
ive 0; Mismatches 0; Indels
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[6. .20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 3; Page 74; 104pp; English.
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CTGAGGACATCAACAAGCGC 474

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Local Similarity

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and CTK5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neutrological disease. These diseases include thrombocytopaenia, mental retardation, wiskort-Adaric, syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                       New antisense oligonuclectides for modulating PCTAIRE protein kinase 1
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                Claim 3; Page 75; 104pp; English.
                                            06-DEC-2002; 2002WO-US039138.
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1603 ACCGAGTTCTAAGCCACAGA 1622 20 ACCGAGTTCTAAGCCACAGA d

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BP.

AAL61773/ RESULT

Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204210. AAL61773 standard; DNA; 20 22-SEP-2003 (first entry) AAL61773;

hyperproliferative disease, neurological disease; thrombocytopaenia, retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy, mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone; Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; antisense; ss

*tag= Key modified_base Homo sapiens. Synthetic.

/mod_base= OTHER /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines" Location/Qualifiers æ 1. .5 /*tag= modified base

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/mod_base= OTHER /note= "2'methoxyethyl nucleotides" /note= "2'methoxyethyl nucleotides" /mod base= OTHER 07-DEC-2001; 2001US-00017621. 06-DEC-2002; 2002WO-US039138. U 16. .20 /*tag= c (ISIS-) ISIS PHARM INC Roach MP; WPI; 2003-577271/54. WO2003049691-A2 modified base Freier SM, 19-JUN-2003

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE-1, PTCK1 and CTK5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a protein kinase I, particularly a hyperproliferative disease or a retardation, Miskott-Aldrich syndrome, retinitis pigmentosa, dystennia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or sequence is used to illustrate the method of the invention Claim 3; Page 75; 104pp; English. thrombocytopenia.

1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72; 0; Indels Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other; 100.0%; Prea. ... Query Match
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Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204143. BP. AAL61706 standard; DNA; 20 (first entry) 22-SEP-2003 AAL61706; AAL61706/

Human: PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charoct-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;

antisense; ss.

Homo sapiens. Synthetic.

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for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE.1, PTCK1 and crk5). The antisense oligomucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pygmentosa, dystonia with Parkinsonism, sideroblastic anameia, X-linked Charcot-Marie-Tooth disease, or incontinentia pygmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
        compositions and methods
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16. .20
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              invention relates to
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Freier SM,

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/note= "Phosphorothioate backbone; All cytidines are 5-
                                 New antisense oligonucleotides for modulating PCTAIRE protein kinase I gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; x-linked Charcot-Marie-Tooth disease; therapy; mental retardation; wiskott-Aldarich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothicate backbone;
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                                                                                                                                                                                                                                                                                                                                                                                  sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72;
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/note= "2'methoxyethyl nucleotides"
16. .20
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                                                                                                                            Claim 3; Page 75; 104pp; English.
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/mod base=
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          WPI; 2003-577271/54.
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                                                                                                thrombocytopenia.
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AAL61772/c
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
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/note= "Phosphorothioate backbone; All cytidines are 5-
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gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
thrombocytopenia.
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                                   Gaps
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                                                                                                                                                                                                                                                  Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204186.
1.1%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 72;
ive 0; Mismatches 0; Indels
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                                                         335 ACGAGGACTTGAAGATGGGG 354
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/mod_base= OTHER
'mod_base= OTHER
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             Similarity
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Query Match
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                           Matches
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disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase i in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are
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100.0%; Pred
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                                                                                                                                   Local Similarity
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AAL61720 standard; DNA; 20 BP

AAL61720/c RESULT 9

AAL61720;

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as CTATAIRE). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE or protein kinase 1, particularly a hyperproliferative disease or a currentation wiskott-Aldrich syndrome, retinitis pigmentosa, mental cretardation, wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia vith Parkinsonism, sideroblastic anaemia x-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein contains as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "Phosphorothioate backbone; All cytidines are 5-
Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease, therapy; mental retardation, Wiskott-Aldrich syndrome; dystonia, Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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"note= "2'methoxyethyl nucleotides"
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/note= "2'methoxyethyl nucleotides"
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as CC for modulating the artisense oligomuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE CC treating an animal having a disease or a protein kinase 1, particularly a hyperproliferative disease or a condition disease. These diseases include thrombocytopaenia, mental cretardation, wiskott-Aldrich syndrome, retinitis pigmentosa, distonia cretardation, wiskott-Aldrich syndrome, retinitis pigmentosa, distonia cuit parkinsonism, sideroblastic anaemia X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein con as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                                                                                                          Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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/note= "Phosphorothioate backbone; All cytidines are
                                                                            Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204157.
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/note= "2'methoxyethyl nucleotides"
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Similarity

273 IGCIGCICCIGGGAACTIC 292

20 TGCTGCTCCTGGGGAACTTC 1

/*tag= a /standard_name= "single nucleotide polymorphism"

Lander ES;

Location/Qualifiers

/*tag=

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DNA sequences AAH62100 - AAH6268B represent segments of human genes which contain single nucleotide polymorphisms (SNPs). A method is included in the invention for analysing a nucleic acid sample, which consists of determining the base occupying any one of the polymorphic sites given in the SNP containing sequences. The nucleotide sequences can be used in the diagnosis or monitoring of diseases, such as cancer, inflammation, heart microorganisms. The oligonocleotides are also useful in the manufacture of a medicament for the treatment or prophylaxis of the diseases, and as a pharmaccutical. SNP containing oligonocleotides are useful in medicines such as phenotype correlation, forensics, paternity testing, medicine and genetic analysis
                                                                                                                                                                                                                                                                                                       New nucleic acid segments of the human genome, particularly from genes including polymorphic sites, for phenotype correlation, forensics, paternity testing, medicine and genetic analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
                                                                                                                                                                                                                           (WHED ) WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 37; 80pp; English.
                                                                                                                                                                                                     99US-0167334P.
                                                                                                                                                                        17-NOV-2000; 2000WO-US031639
                                                                                                                                                                                                                                                     Cargill M, Ireland JS,
                                                                                                                                                                                                                                                                                WPI; 2001-367705/38.
                                                                                                                      WO200138576-A2
               Homo sapiens
Unidentified
                                                                                                                                               31-MAY-2001
                                                    Key
variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAL61700;
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Gaps .; 0 Score 21; DB 1; Length 21; Indels Sequence 21 BP; 9 A; 4 C; 6 G; 2 T; 0 U; 0 Other; . 0 100.0%; Pred. No. 49; 1.2%; Query Match
Best Local Similarity 100.(

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AAL61700 standard; DNA; 20 BP 22-SEP-2003 (first entry)

Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204137.

Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone; antisense; ss

Homo sapiens

. The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTCK1 and CrK5). The antisense oligomucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a protein kinase 1, particularly a hyperproliferative disease or a retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This /mod_base= OTHER /note= "Phosphorothioate backbone; All cytidines are 5-New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or Gaps . sequence is used to illustrate the method of the invention Score 20; DB 1; Length 20; Pred. No. 72; 0; Indels "2'methoxyethyl nucleotides' /note= "2'methoxyethyl nucleotides" Sequence 20 BP; 2 A; 9 C; 2 G; 7 T; 0 U; 0 Other; Mismatches Location/Qualifiers Example 15; Page 73; 104pp; English. methylcytidines" mod_base= OTHER /mod_base= OTHER 46 Match Local Similarity 100.0%; Pr 20 AATGCAGAGGTAGGCAGGAG 27 AATGCAGAGGTAGGCAGGAG 06-DEC-2002; 2002WO-US039138 07-DEC-2001; 2001US-00017621 1..5 /*tag= b Ø 16. .20 'note= /*tag= (ISIS-) ISIS PHARM INC. Freier SM, Roach MP; WPI; 2003-577271/54. thrombocytopenia. WO2003049691-A2 Key modified_base modified_base modified_base Synthetic Query Match %XCCCCCCCCCCCCXXXBXBXBXBXBXBXBXBXBXBXBBXS ਨੇ g

Human PCTAIRE protein kinase l antisense oligo, ISIS 204151. BP AAL61714 standard; DNA; 20 (first entry) 22-SEP-2003 AAL61714; AAL61714/c BXBXKXX

Matches

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AAI30264 RESULT

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The invention relates to the identification of nucleic acid molecules (AAI29513-AAI31314) from the human genome which include polymorphic sites which can predispose individuals to disease. Various genes from a number of individuals were resequenced and single nucleotide polymorphisms (SNPs) in these genes discovered. The method is useful for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype. The nucleic acids containing the polymorphic sites may be useful in forensics and paternity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acid molecules from the human genome which include polymorphic sites, useful in methods for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype.
                                                                                                           Human, resequence, genotype, disease, forensic, paternity testing; single nucleotide polymorphism; SNP; ss.
                                                                                                                                                                                                                                                       /standard name= "single nucleotide polymorphism"
                                                                            Human single nucleotide polymorphism (SNP) PCTAIRE3 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Single nucleotide polymorphism; SNP; human; cancer; heart disease; paternity testing; forensic science;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCTAIRE-1 polymorphism containing DNA fragment #96.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  577 GICAGCCIAICIGAGAIIGGCIIIIGGGAAAC 607
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Pred. No. 60;
0; Mismatches
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22-MAY-2000; 2000US-0206129P.
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(first entry)
                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cargill M, Ireland JS,
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nes 25; Conserv
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12-SEP-2001
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                  AAI29606;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acid molecules from the human genome which include polymorphic sites, useful in methods for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a
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       Gaps
                                                                                                                                                                                                                                                                                                 Human; resequence; genotype; disease; forensic; paternity testing; single nucleotide polymorphism; SNP; ss.
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/standard name= "single nucleotide polymorphism"
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       Indels
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Pred. No. 46;
                                                                                                                                                                                                                                                                  Human single nucleotide polymorphism (SNP) 97.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       979 GACCTCAAGCCCCAGAACCTGCTCATCAAC 1008
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       Mismatches
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replace(16,T)
/*tag= a
                                        136 AAGAAGATCAAACGGCAGCTGT 157
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 75; 145pp; English.
                                                                          AAGAAGATCAAACGGCAGCTGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-MAR-2000; 2000US-0187510P
22-MAY-2000; 2000US-0206129P
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larity 83.3%;
Conservative
                                                                                                                                                                AAI30264 standard; DNA; 31
         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-522952/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         particular genotype.
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les 25; Conserv
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                                                                                                                                                                                                                                                                                                                                                               sapiens
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                                                                                                                                                                                                                                       18-OCT-2001
          22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cargill M,
                                                                                                                                                                                                                                                                                                                                                                                                                  Variation
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                                                                                                                                                                                                    AAI30264;
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Homo

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Gaps

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DB 1; Length 31; Indels inflammation;

AAI29606 standard; DNA; 31

AAI29606 ID AAI2

Matches

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Medicinal compositions for the treatment of dementia and Alzheimer' 28-APR-2000; 2000JP-00131037. ABA04100 standard; DNA; 33 (first entry) 26; Conservative Similarity (SUZU/) SUZUKI T. WO200182967-A1 Homo sapiens 21-FEB-2002 08-NOV-2001 Suzuki T, disease, ABA04100; Query Match Local Best Loca Matches ABA04100/c à g

ВР

The present invention describes medicinal compositions (I) inhibiting beta-amyloid production comprising an active component a substance that inhibits the activity of cyclin-dependent kinase (CDK). Also described are: (1) a method for screening compounds for their ability to inhibit the production of beta-amyloid by contacting with beta-amyloid producing cells; and (2) screening kits. (I) have nootropic and neuroprotective activities. (I) suppress the phosphorylation of amyloid precursor protein (APP) which is an essential step in the production of beta-amyloid. (I) can be used in the treatment and prevention of neurodegenerative diseases such as dementia and Alzheimer's disease. The present sequence represents a PCR primer which is used in the exemplification of the present comprise compounds that suppress beta amyloid production Example 6; Page 23; 62pp; Japanese.

DB 1; Length 33; Sequence 33 BP; 6 A; 6 C; 11 G; 10 T; 0 U; 0 Other; Pred. No. 41; Score 22.4; 1.3%; 81.2%;

1018 GAGCTCAAGCTGGCTGACTTTGGCCTGGCCCG 1049 GAGCTGAAATTGGCTAATTTTGGCCTGGCTCG

Human Cdk5 related PCR primer SEQ ID NO:19.

Human; beta-amyloid; cyclin-dependent kinase inhibitor; nerve cell; amyloid precursor protein; APP; Cdk5; PCR primer; ss.

25-APR-2001; 2001WO-JP003555

(YAMA) YAMANOUCHI PHARM CO LID

Hachiya Kawabata S, Watanabe T,

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WPI; 2002-026209/03

Medicinal compositions for the treatment of dementia and Alzheimer's disease, comprise compounds that suppress beta amyloid production.

Example 6; Page 23; 62pp; Japanese.

beta-amyloid production comprising an active component a substance that inhibits the activity of cyclin-dependent kinase (CDK). Also described are: (1) a method for screening compounds for their ability to inhibit the production of beta-amyloid by contacting with beta-amyloid producing cells; and (2) screening kits. (1) have notropic and neuroprotective activities. (1) suppress the phosphorylation of amyloid precursor protein (APP) which is an essential step in the production of beta-amyloid. (1) can be used in the treatment and prevention of neurodegenerative diseases The present invention describes medicinal compositions (I) inhibiting

. 0 The present sequence represents New antisense oligonucleotides for modulating PCTAIRE protein kinase I gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy, mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; PCR; primer; ss. Gaps such as dementia and Alzheimer's disease. The present sequence rea PCR primer which is used in the exemplification of the present invention ö Human PCTAIRE protein kinase 1 DNA specific reverse PCR primer. DB 1; Length 33; Indels Sequence 33 BP; 10 A; 11 C; 6 G; 6 T; 0 U; 0 Other; 9 1018 GAGCTCAAGCTGGCTGACTTTGGCCTGGCCCG 1049 32 GAGCTGAATTGGCTAATTTTGGCCTGGCTCG 1 0; Mismatches Score 22.4; I Pred. No. 41; 1.3%; 07-DEC-2001; 2001US-00017621. 06-DEC-2002; 2002WO-US039138 81.2%; AAL61693 standard; DNA; 22 (first entry) Query Match
Best Local Similarity 81.23
Matches 26; Conservative (ISIS-) ISIS PHARM INC. Freier SM, Roach MP, WPI; 2003-577271/54. WO2003049691-A2. Homo sapiens. 22-SEP-2003 19-JUN-2003 AAL61693; AAL61693/c RESULT 3 SSSSS à d

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Gaps

.; 0

6; Indels

0; Mismatches

Example 13; Page 71; 104pp; English.

thrombocytopenia.

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and CTK5). The antisense oligonuclecitide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonuclecide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is human PCTAIRE protein. illustrate the method of the invention

Sequence 22 BP; 3 A; 6 C; 4 G; 9 T; 0 U; 0 Other;

DB 1; Length 22; 33; 1.3%; Score 22; 100.0%; Pred. No. Query Match Best Local Similarity

Mouse multidrug re Human biallelic ma	itis B viru	angiotens	Human ACE, AGI and Rat FGFR coding se	Dog genomic marker	Dog genomic marker	Murine passeca and PCR primer used to	Mouse inducible NO	Human hnRNP Al pho	PCR primer for fac	Forward PCR primer	Cryptosporidium pa	FA-Z Cransyene dec Human endometrium	Salmonella typhimu	PCR primer used sp	Primer to detect C	Primer to detect T	Canine retroviral Human ROF transcri	Microorganism dete	Human MADH6 mRNA a	Human MADH6 mKNA a PCR primer used to	Cystatin M gene sp	Primer ON-DinB1-F3	Human caspase 6 an	Human HDA1 antisen	Candida albicans G	Human 15-10 couing Capture oligonucle	Human atopic derma	Chimeric phosphoro Human nol kanna 76	Human IL-12 p35 su	Human talin phosph	Vpr-driven constru Mouse short hetero	Murine p38-alpha M	Neuroblastoma-rela	Arabidopsis thalia	Neuroblastoma-rela	Human NEMO gene in Cvclin D1 PCR prim	Micoorganism seque	ot Dec	Antinsense oligonu	O-glycan alpha2,8-	Single nucleotide	Human SHH specific	Human gene PCR pri Human oligonucleot	Human oliqonucleot	Human oligonucleot	Human oligonucleot	Sorting nexin 3 de		Mouse p38 MAPK ant	R19956-derived oli	Human myosin X-der	AA486518-derived o	11) 39,1105-7,1001
1 AAA40720	1 AAA79748	1 AAA38236	1 AAC61236 1 AAA95391	1 AAA66189	1 AAA66813	1 AAC79540 1 AAE55056	1 AAH75317	1 AAC92776	1 AAC92806	1 AAD04441	1 AAH00813	1 AAH22573 1 AAH24592	1 AAD11810	1 AAC83279	1 AAC86079	1 AAC86072	1 AAC89125	1 AAH03059	1 AAH26635	1 AAH26636 1 AAH4259	1 AAD41542	1 AAD41116	1 ABN89213 1 AAT.40334	1 AAD40926	1 ABZ31413	1 AAL48224 1 ABI97181	1 ABK49768	1 ABK69328	1 AAD41680	1 ADG90476	1 ACA97213	1 ABX78139	1 ABT43349	1 ABX95014 1 AAD52514	1 ABT32516	1 ACD23029	1 ADA27483	1 ACD13554	1 ADB90005	1 ADC73020	1 ADF88295	1 ADG93083	1 ADH94427	1 AB292/32	1 ABZ86781	1 ABZ90932	1 ABZ92011 1 ABZ75745	1 ADA26843	1 ADM34276	1 ABD23011	1 ABD23272	1 ABD27162	I ABDZB96Z
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Human HDAC9 exon 4 Mouse and human mi RTO-PCR primer #1	P	RT	Human NOVZ RIO PCR	RT	Money Prince	Rat DERP DNA ampli	Primer of the inve	PCR primer JEGE1F2	bun primer for him		11	ŭ	Human CD20 G-cleav	HBA2 mutation corr	ᇁ.	Primer #3 used to	Human multi drug r	Human High Scannin	Himan FPC DNAstmo	Human ERG hammerhe	Human ERG hammerhe	Human ERG Amberzym	Human PAPP-Ea asso	Human PAPP-Ea asso	Human CLCAl gene e	Human CLCA1 gene e	Human CLCAl gene e	MNV minns strand I	minus strand	Zinzyme subst		Zinz	Tumour suppression	Human K-Ras DNAzyme	Human CYP2D6 targe	Human CYP2D6 targe	Human IKK-gamma su	Human Vbeta gene r	Cellular inhibitor	Human c-IAP-2 mRNA	Human biallelic ma	Antisense oligo, I	Himan ING PCP orim	Human UNG methylat	Human SRC-1 antise	Haematopoietic cel	Prostate tumour re	Human UNG PCR prim	I	. (Human Vbeta gene r	Labelling molecule	Synthetic leader s	Synthetic leader s	Synthetic leader s	Synthetic leader s	3'-primer for HLA	Sense primer Exon	cdk3 rlbozyme bind PCR primer used to
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L	Human fibrosis/sca	Thale cress VIP4 o	Human methyl-CpG-b	Human methyl-CpG-b	Reverse primer #24 Himan CFTR Gene in	Potato PPO primer	HEV strain BUR-121	Primer B2 (Group 4	HEV strain Burma-1	HEV ORF proteins e	Human ICAM-1, E-se	Human polymorphic	Q٠١	Tumour necrosis fa	HSV-2 ICP6 gene pr	Human biallelic ma	Human biallelic ma	Reverse primer #25	Mouse LKBI PCR pri	gene		gene	numan gene singie	bourne on- car gone	pre primer for med	SNP specific lower	Primer PHN33881, t	YMDD oligonucleoti	YMDD oligonucleoti	YMDD oligonucleoti	YMDD oligonucleoti	MDD Oligomacieuci Human androden red	DMS:acceptor oxido	Human TNFR2 forwar	NOV68 PCR primer,	Human OCT1 consens	Nucleic acid encod Rat RRK-3 designed		cyp2D6 prob	Human DNA probe us	Human DNA probe us	Human DNA probe us	Himan Flk-1/KDR DN	ICAM-	Device with substa	c	Baculovirus C2 com	Single nucleotide	Reverse primer #26	Primer A #1 used a	Human automated ge	bicans	Auman NOVI IOLWAIG	Bacillus sp novel	p nove	gene	Human NOV1 gene PC	gene	human prot	NOVX DNA F	
1 ABT05572 1 ADH49031 1 ABX72335 1 ACD19499																															1 ABA01355	1 ABA01365	1 ARU3043B														1 AAQ41809										1 AAL43762		ACD13	ABX7230	
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Human LIPIN3 exon1 cdkc ribozyme bind cdkz ribozyme bind	Cell-cycle depende	Cyclin D1 ribozyme	Cell-cycle depende	Human IGF-1R trans	Human ERG2-targete	Human ERG2-targete	KIAA0783 extend pr	Growth normone rec	Heparocyce muciear	PCK primer used to	PCR primer Hill91	Detecton sequence	Times Charl shoanh	1 5-aphydrodlicito	Himan NADH libidlin	Linear STATS artise	Himan Chromosome 2	Human Stat3 antise	Human dual specifi	Mouse CLASP-5 PCR	Human HKR1 phospho	MHC class II trans	503	Forward Ag5335 RT-	Human gene PCR pri	Human oligonucleot	NRY polymorphism d	H86812-derived oli	Human SMKT Chimeri Human SMRT target	Cvolin dependent k	Human PCTAIRE prot	Human PCTAIRE prot	Human polo-like ki	Human polo-like ki	NUCLEIC ACID AMALY Drimer of the inve	Primer of the inve	Antisense DNA olig	Antisense DNA olig	Antisense DNA olig	Human MOGRA-1 Ohim	. 1	-	ц		Cancer associated	Himan bolymorphic	Human polymorphic	_	Murine chemokine r	Bacterial Cytochro	CDKZ-targeted sina	Traced	ingle multiplex	for don	#7	Canine disease mar	, 8		er	SNP specific lower PCR primer Vkappa3	
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Oligonucleotide #3 Human Flk-1/KDR DN Sulphurised oligon	Sulphurised oligon	Phosphorothioate o	Human heat shock p	Yin yang-1 (YY-1)	B-B10 V region pri	Anti-CMV 2'-0-alky	Human NOV2 RTQ PCR	Human G-protein co	Human NOV31 revers	CMV antisense oliq	Coriolus hirsutus	Human NOV1 forward	Drosophila F-eleme Fly hwa bob primer	Modified oligonucl	C-fos mRNA detecti	Candida CDK1 gene	Cloning vector mil	Degenerate PCR pri	Chicory germacrene	Human Fc-epsilonRI	Human chromosome 1	Antisense PCR prim	Toxicologically re	PCR primer P74 use	Multiple cloning a	IGF-I oligonucleot	IGF-I oligonucleot	Human PCTAIRE prot Human G-almba-12 a	M. tuberculosis PC	cdk2 ribozyme bind	Cell-Cycle depende Drobe to mitant se	Interleukin IL-8 h	Transforming growt	Probe to detect in	Probe IL-8 for Int	HCV type 1 NS-4 se Human dene signatu	PCR primer CRYVIR.	PCR primer used to	PCR primer promer prome	Human TANGO 298 Ta	Human Factor V gen	ecinoic acid ucleic acid	Beta-actin upstrea	Human DNA RT-PCR p	Human retinoic aci	Set 1 left por	Cdc 2 kinase hamme	Cdc 2 kinase hamme	ž	Cdc 2 kinase hamme	Cdc 2 kinase hamme	Human guanylate bi	Antisense inhibiti SNP-containing car	
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gala ense : #2	Human TSC gene exo	86	CMV antisense chim	fie	Phimpric 2'-0-meth	Chimeric 2'-0-meth	Phosphorothicate o	Target cytomegalov 2'-MOE gapped vers	Oligonucleotide us	Oligonucleotide us	Deletion sequence	HIV 5' ITTR homolog	sphore		Mismarch reporter	# # F	118	oyd	HCMV targeting ant	HCMV targetted pho	CMV replication ch	CMV replication ch	Synthetic oligonuc	Example biological	Example biological	Anti-CMV oligonucl	Human gene single Human gene single	Oligonucleotide #3	Modified phosphoro	CMV targeted antis	Hepatitis C virus	Hepatitis C virus	Methylated antisen	Cytomegalovirus (C	Novel G protein-co	Oligomeric compoun	Oligomeric compoun	Human light chain	Synthetic phosphor	HCMV inhibitory an	Human IE-2 antisen	IE-		Antiviral screenin Antiviral screenin	4 40	sense	cyt	antie	screeni	Antiviral screenin . HCMV mBNA targetin	inhibi	TGR	Human GPCR TGR23-2 Murine anit-CD4 Fa	
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Anti-CMV oligonucl Anti-CMV oligonucl STK 7 gene specifi	4 gene	PCR primer used to	PCR primer hGH S2.	Human FADD primer	Gene typing PCK pr	Readle dog ob dene	Primer MUC5B rever	Human-specific glo	Human MEKK1 phosph	Human Her-1 antise	Chimeric beta-gluc	Human calreticulin		Mouse genomic DNA	Human Recu protein	Phosphorothicate o	Human p38-beca Mar	Mouse sich chimer	numum 111mz introdu	Matrix metalloprof	Tantin denergation	DOD DIJBOT #2 11860	איזה ביוור ביור איזיה	uciectus uman dene DCD nri	⊣ -	MADK	TITE COLUMN SECTION OF THE PROPERTY OF THE PRO		GRK6 DNA t	JAM 3 ant	JAM 3 targe	Human qlucocortico	Human glucocortico	Rat PIM1 antisense	Human cell divisio	Human cell divisio	Human cell divisio	Human LIM domain k	Cyclin dependent k	Cyclin dependent k	Hûman phospholipas	Human phospholipas	Human VEGF co-regu	Human VEGF co-regu	POICING SCENI CELL	uman mPGES-1	Human forkhead box		Human NIMA-related	DNA for modulating	DNA for modulating	Antisense oligonuc	Peptide nucleic ac	Peptide nucleic ac	Antisense oligonuc	IE2 translational	Chimeric 2'-0-meth	Chimeric 2'-0-meth	Phosphorothioate c	Anti-cytomegalovir	ISIS-2922, cytomeg
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FOrward primer use CDK2 sNA-target R Human ribosomal pr Human Myb protein	Vascular endotheli Himan G-protein co		Probe for Streptoc	Tagman probe of th	SNP specific upper	Mucor circinelloid	Fruit fly LRR47 po	Oligonucleotide ad	Oligonucleotide ad	Carature oliconiale	Capture Origonacie	Capture Oligonicle	Capture oliconucle	Capture oligonucle	Capture oligonucle	PCR primer 1 used	Mouse Ly6g6d cDNA	Human ERG Amberzym	Human PAPP-Ea asso	n CLCA1 gene	WNV minus strand I	WNV Amberzyme subs	Murine oligonucleo	Human Ty protease	cdk3 ribozyme bind	Cell-cycle depende	Mitogen activated	Mitogen activated	Human EKG2-targete	Human EKGZ-targete	Human PDGFr-target	Human FDGFr-target	Dimen MOWE ye	Human ABC transpor	Human Mol protein	Human gene express	Human p21 gene PCR	Forward PCR primer	Human beta-site AP	Human beta-site AP	Micisense Origonac	Himan MARKS CONA +	Antisense oligonuc	Human PPP2R1A anti	Human foxhead box	uma	Farnesold X recept	מנו	Daniel First Din an	Human forkhead box		Σ			Sense primer Exon	Primer for Human h	. ~	gene sin richia co	: ::	plasmid	CMV antisense olig
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;	STK 10 gene specif	Human oligonucleot	AA664176-derived o	Auctsellse orrgolluc	Farnesoid X recent			Human androgen rec	Human microarray D Ractorial 16c DNA	Hepatitis C virus	Human chromosome 1	Human pigmentation	Human src biomarke	Human DNA probe us	Human CETP DNA rel	Human PDE4A-MIA OI	Oliconiclectide se	Oligonicleotide as	Human oligonucleot	Human oligonucleot	PCR primer G6 used	Zmax1 gene region	Human p70 ribosome	ZMAXI C	Comman half SIS mark	Human Cvolin-depen	Soluble type I ins	Primer Cused in t	Human neuregulin 5	Capture oligonucle	Capture oligonucle	Capture oligonucle	capture origonaties	cdk7 ribozyme bind	Cyclin D2 ribozyme	cdk7 ribozyme bind	Cyclin D2 ribozyme	Cell-cycle depende	Cell-cycle depende	Human VEGFR2 short	Human VEGFR2 short	Dog genomic marker		CDC2 gene antisens	01i	Human PDE4A oligon	Human Cligonucleot	AA486518-derived o	yosin X-de	Human requiem anti	CDC2 PCR primer, S	Vilgonucleotide as	Human mPGES-1 chim	Human mPGES-1 chim	Human oligonucleot	BTG2 gene antisens	Cyclin-dependent k	Human jagged 1 tar	Human jagged 1 ant	rene single	NFEZEL POLYMOIPDIS Human NOVX DNA PCR	
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New recombinant nucleic acid encoding a mammalian SNORF7 receptor for use as a probe and for expressing SNORF7 receptor in transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cell surface receptor; inflammation; arthritis; autoimmune disease; AIDS; transplant rejection; infection; septicaemia; psychosis; neurological disorder; Parkinson's disease; Altheimer's disease; depression; respiratory disorder; asthma; eating disorder; obesity; cardiovascular disorder; ischaemia; cancer; PCR; primer.
                                                                                                                                                                                to detect the existence of mucleic acids having complementary sequences in samples. They are also used to express SNORF7 receptor in transfected cells. The receptors are also used to design drugs for treating such diseases as inflammation, autoimmune diseases and neurological disorders. The present sequence is a PCR primer used to identify and isolate human
                                                                                                                                 The invention relates to mammalian SNORP7 receptors and to nucleic acid molecules encoding such receptors. Polynucleotides of the invention are used as probes to obtain homologous nucleic acids from other species and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; GPCR; SNORF7; ss; G protein-coupled receptor; neuroregulator;
                                                                                                                                                                                                                                                                                                                        th 1.0%; Score 16.6; DB 1; Length 24; Similarity 82.6%; Pred. No. 3.8e+02; 19; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                           Sequence 24 BP; 5 A; 8 C; 6 G; 5 T; 0 U; 0 Other;
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                                                                                                        Disclosure; Page 3; Opp; English.
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 Bonini JA
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                            WPI; 2003-801282/75.
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The invention relates to a recombinant nucleic acid comprising a sequence

Disclosure; SEQ ID NO 7; 25pp; English

New recombinant nucleic acid comprising a sequence encoding a mammalian SNORF7 receptor, useful for studying the effects of neuroregulators for developing agonists and antagonists for cell surface receptors.

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encoding a mammalian SNORF7 receptor (a G protein-coupled receptor, GPCR)
and hybridising under high stringency conditions to a sequence encoding a
human or rat SNORF7 receptor and having a sequence of the human or rat
SNORF7 nucleic acid contained in plasmid pCR2.1-hSNORF7-p (ATCC Accession
No. 203778) or plasmid pEXJ.T7-rSNORF7-f (ATCC Accession No. 203777),
respectively. The recombinant nucleic acid is useful for studying the
c ffects of neurorequlators for developing agonists and antagonists for
cell surface receptors. SNORF7 also serves as a tool for developing drugs
CC for treating inflammation (e.g. arthritis), autoimmune disease (e.g.
AIDS), transplant rejection, infection, of e.g. septicaemia), psychosis,
neurological disorders (e.g. Parkinson's disease, Alzheimer's disease,
depression), respiratory disorders (e.g. ischaemia), cancers, and many
cother classes of disorders detailed in the specification. The present
sequence is a PCR primer used to isolate CDNA encoding human SNORF7.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide primer extension (SNPE) primers, and the sequences of regions flanking sites of single nucleotide polymorphisms SNPs. The present invention includes kits for determining the presence or absence of a SNP, using the oligonucleotides of the invention. The PCR primers are used to amplify a SNP flanking sequence, the SNPE primer is used as a genotyping primer. The oligonucleotides are useful for genotyping a nucleic acid sample by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
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Pred. No. 3.8e+02;
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performing a single-nucleotide primer extension reaction. The
cligonucleotides are useful for determining the presence, absence or
classes by association analysis the genotype of an individual or group of
individuals, having a pathological phenotypic trait suspected of being
caused by one or more SNBs. Phenotypic traits include diseases e.g.
agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
csteogenesis imperfecta and acute intermittent porphyria. Phenotypic
traits also include symptoms of or susceptibility to multifactorial
cdisease of which a component is or may be genetic such as autoimmune
cdiseases, including, rheumatoid arthritis, multiple sclerosis,
inflammation, cancer, nervous system diseases and infection by pathogenic
microorganism. The method is also useful in forensic investigations and
paternity analysis. The present sequence represents a single nucleotide
containing DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                 Gaps
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30-JAN-2001; 2001WO-U5000662.

30-JAN-2001; 2001WO-U5000663.

30-JAN-2001; 2001WO-U5000664.

30-JAN-2001; 2001WO-U5000665.

30-JAN-2001; 2001WO-U5000665.
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2000GB-00024263.
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                                                                                                                                                                                                                                                                                                                                                 82.6%;
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                                                                                                                                                                                                                                                                                                                                                                    19; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AEOM-) AEOMICA INC.
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                                                                                                                                                                                                                                                                                                                                                 Local Similarity
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27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
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The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 cacids cacids can be used as probes to detect, characterise and quantify chapter. Inucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 capressing the proteins. The hGDMLP-1 proteins or polypeptides may be expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 capture probes for surface-enhanced laser desorption ionisation, as tharpouries or hGDMLP-1 proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The ciscondard with the expression of hGDMLP-1, in particular heart of disorder associated with the expression of hGDMLP-1, in particular heart can deserbed may be used for changone 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this parent did not form part of the printed to chromosome 22. The sequence data for this parent did not form part of the printed to chromosome 22. The sequence data for this parent did not form part of the printed to chromosome 22. The sequence data for this parent did not form part of the printed to chromosome 22.
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New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 25 BP; 2 A; 11 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                          Disclosure; SEQ ID NO 15293; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  555 CCTCAGCCGCCGCCTCCGTG 577
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2001WO-US000664.
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2000US-0236359P.
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2001WO-US000667
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Best Local Similarity 82.6
Matches 19; Conservative
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27-SEP-2000;
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Chen W,

Rank DR,

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The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynuclectide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 calcide acids in samples, as amplification substrates, to hGDMLP-1 mucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser describin instain, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The capture associated with the expression of hGDMLP-1, in particular heart can descent sequence encoding hGDMLP-1 is localised to chromsome 22.

The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the printed continuous c
                                                                                                                                                                                                                                                                                                                                                                      New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 15297; 214pp; English
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                                                                                                                                                                                                                                         Hanzel DK,
                            30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
05-FEB-2001; 2001US-0266860P.
30-JAN-2001; 2001WO-US000668
                                                                                                                                                                                                                                     Gu Y, Ji Y, Penn SG,
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Sequence 25 BP; 2 A; 11 C; 4 G; 8 T; 0 U; 0 Other;

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ch 1.0%; Score 16.6; DB 1; Length 25; l Similarity 82.6%; Pred. No. 3.9e+02; 19; Conservative 0; Mismatches 4; Indels
                                                                        557 TCAGCCGCCGCCTCCGTCGTGTC 579
                                                                                              Query Match
Best Local (
                      Best Loca
Matches
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0; Gaps

ABV82333 standard; DNA; 25 03-JAN-2003 ABV82333; 166 RESULT 166 ABV82333/c

BP

Human HTPL scanning oligonucleotide SEQ ID 3579. (first entry)

Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Parched like protein; testis; adernal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.

Homo sapiens

EP1229046-A2

07-AUG-2002

28-JAN-2002; 2002EP-00001167.

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The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL codon in HTPL-S (S for short) compared to HTPL-I (L for long). HTPL codon in HTPL-S (S for short) compared to HTPL-I (L for long). HTPL codon in HTPL-S (S for short) compared to HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is contract in regulating male germ cell development, and the HTPL gene was mapped to human chromosome lop12.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of the HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
                                                                                                                                                                                                                                                                                                                                                                                      Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 25 BP; 8 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; Page 533; 718pp; English.
                                      30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
23-MAY-2001; 2001US-00864761.
09-OCT-2001; 2001US-0327898P.
                    2001WO-US000663
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nes 19; Conservative
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Matches
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219 CCTGGATGAGAGTGGTGGTG 241 ccaegarerracrearegreere 25 ઠે g

ABV82338 standard; DNA; 25 (first entry) 03-JAN-2003 ABV82338; ABV82338/c

Human, gene therapy, tumour suppressor; HTPL, chromosome 10p12.1; human testis expressed Patched like protein, testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss. Human HTPL scanning oligonucleotide SEQ ID 3584.

EP1229046-A2

07-AUG-2002

06-APR-2001; 2001US-00827998.

01-AUG-2002.

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The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL stars an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is comportant in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in cuseful for diagnosing a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an entire infertility and cancer. The present oligonucleotide was used in an
                                                                                                                                                                                                                                                                                                                                                                       Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           216 AGGCCTGGATGAGAGTGGTG 238
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                                                                              30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
33-JAN-2001; 2001WG-US000669.
33-JAN-2001; 2001WG-00864761.
                 28-JAN-2002; 2002EP-00001167
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This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, harpep-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                      New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1005 CAACGAGAGGGAGAGCTCAAGC 1027
                                                                                                                                                                                                                                                    Example 2; Page 258; 353pp; English
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                                                           26-MAY-2000; 2000US-0207456P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABS75866 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-DEC-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 1.0
Best Local Similarity 82.6
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-697817/75
                                                                                                                                                                      WPI; 2002-697817/75
                                                                                         (GUYY/) GU Y.
(SHAN/) SHANNON M
                                                                                                                                        Su Y, Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GUYY/) GU Y.
(SHAN/) SHANNON M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2002102252-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABS75866;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 169
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Gaps ;

ВЪ

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WPI; 2002-697817/75.
                                                                                          Gu Y, Shannon ME;
                                                      ABS75867;
                                  Query Match
                                                                                      (GUYY/)
(SHAN/)
                                                RESULT 170
                                                                      Ното
                                     Matches
                                                 ABS75867
à
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This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgemetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence reperseents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention associated plasma protein E, for preventing or aborting pregnancy New isolated nucleic acid encoding an isoform of human pregnancy Example 2; Page 258; 353pp; English.

1.0%; Score 16.6; DB 1; Length 25; 12.6%; Pred. No. 3.9e+02; ve 0; Mismatches 4; Indels Sequence 25 BP; 10 A; 4 C; 10 G; 1 T; 0 U; 0 Other; 1005 CAACGAGAGGGGAGAGCTCAAGC 1027 82.6%; Local Similarity 82.6

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Gaps

.. 0

CAGCAAGAGGAGAGAGGTCAAGC 24

Human PAPP-Ea associated 25-mer SEQ ID 1393. ABS75867 standard; DNA; 25 (first entry) 27-DEC-2002

BP

PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.

sapiens

JS2002102252-A1.

01-AUG-2002.

06-APR-2001; 2001US-00827998

26-MAY-2000; 2000US-0207456P.

GU Y. SHANNON M E.

associated plasma protein E, for preventing or aborting pregnancy New isolated nucleic acid encoding an isoform of human pregnancy

Example 2; Page 258; 353pp; English.

one This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or

blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in analysis of genetic variation or in hybridisation to a DNA library, compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target sequence. The method of analysis comprises of the nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the uncleic acids further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dother when the control of the control ; 0 aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene. Gaps EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; . 0 1.0%; Score 16.6; DB 1; Length 25; 82.6%; Pred. No. 3.9e+02; rive 0; Mismatches 4; Indels Human microarray DNA oligonucleotide SEQ ID NO 91054. Sequence 25 BP; 10 A; 4 C; 10 G; 1 T; 0 U; 0 Other; Claim 1; SEQ ID NO 91054; 9pp; English 1005 CAACGAGAGGGGAGAGCTCAAGC 1027 1 CAGCAAGAGGAGAGGTCAAGC 23 BB 15-MAR-2002; 2002US-00098263. 16-MAR-2001; 2001US-0276759P. ACI91063 standard; DNA; 25 (first entry) Conservative cross-species comparison. (AFFY-) AFFYMETRIX INC WPI; 2003-567953/53. Local Similarity es 19; Conserv US2003104410-A1 Homo sapiens Mittmann MP; 14-OCT-2003 05-JUN-2003 ACI91063; Query Match datches RESULT 171 ACI91063 888888888 à q nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.goc/sequence.html

Sequence 25 BP; 6 A; 4 C; 8 G; 7 T; 0 U; 0 Other;

88988

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Gaps

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Length 25; 4; Indels

Score 16.6; DB 1; Pred. No. 3.9e+02; 0; Mismatches 4;

Query Match 1.0%; Best Local Similarity 82.6%; Matches 19; Conservative

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for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly
                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;
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0
                                                                                                                                                                                                                                            Score 16.6; DB 1; Length 25; Pred. No. 3.9e+02;
                                                                                                                                                                                                                                                                                                        4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human microarray DNA oligonucleotide SEQ ID NO 47771.
                                                                                                                                                                                   Sequence 25 BP; 6 A; 4 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                           from USPTO at segdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                    1469 TGGGGGAGCGGATCCACAACTT 1491
                                                                                                                                                                                                                                                                                                                                                                                                          2 TGGTGGATCGGATCCAGAAGCTT 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACI47780 standard; DNA; 25 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-MAR-2002; 2002US-00098263.
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                                                                                                                                                                                                                                            1.0%;
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                                                                                                                                                                                                                                         Query Match
Best Local Similarity 82.6
Matches 19, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cross-species comparison.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (AFFY-) AFFYMETRIX INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003104410-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AC147780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 172
ACI 47780/c
ACI 47780/c
ACI 47780/c
DY
AC ACI 477
XX
ACI 13-OCT
ACI 13-OC
      SSSSSXS
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EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;

cross-species comparison.

US2003104410-A1. Homo sapiens.

05-JUN-2003

15-MAR-2002; 2002US-00098263.

Human microarray DNA oligonucleotide SEQ ID NO 51199

(first entry)

13-OCT-2003

ACI51208;

BP.

ACI51208 standard; DNA; 25

RESULT 173 ACI51208/c

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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target sequence in the method of analysis comprises hybridising at least one or more mucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring core family members of a gene and a cross-species comparises. Each of the concleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dotonelect acids further comprises a tag sequence or specific comparises or any gene, in mapping the 5' termini of mRNA molecules by comprise and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence concluded and previously sequenced in the microarray. Note: The sequence of data for this patent can also be obtained in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 51199; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                           16-MAR-2001; 2001US-0276759P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-567953/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mittmann MP
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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in manitoring gene expression levels by hybridisation to a DNA library, and an array is used in analysis of genetic variation or in hybridisation to a DNA library, of at least one target sequence. The method of analysis comprises of at least one or more nucleic acid probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring can expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid support in situ hybridisation, in Southern, Northern or dothor hybridisation to identify or detect the sequence or specific call mutations of any gene, in mapping the 5' termini of mRNA molecules by contact in screening cDNA or genome. Inbraries or subclones cortaining segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the

New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the

sequence or specific mutations of any gene.

WPI; 2003-567953/53.

Mittmann MP;

Claim 1; SEQ ID NO 47771; 9pp; English.

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The present invention relates to nucleic acid sequences that are complementary to particular genes, and can be used as probes for a variety of analyses such as gene expression analysis. Each probe comprises 9 or more consecutive nucleotides from at least one of 14936 nucleotide sequences defined in the patent, or their perfect sense match, sense mismatch, antisense match or antisense mismatch oligonucleotides. The probes may be used in an array comprising at least 10 distinct nucleic acid probes. The array is useful in monitoring gene expression the probes may be used in an array comprising at least 10 distinct nucleic acid probes. The array is useful in monitoring gene expression constitutions, and in hybridisality and-labelled compounds. The probes are also useful in in situ hybridisations of a gene. The probes are also useful in in situ hybridisations, in screening cDNA or genomic libraries (or derived subclones) for additional clones containing sequents of DNA that have been previously isolated and sequenced, in Southern, northern, or dot-blot hybridisation of genomic DNA to identify or detect the sequences of the invention are also useful as PCR primers. The invention provides a large collection of nucleic acid sequences of the invention are also useful as PCR primers. The invention provides a large collection of nucleic acid sequences of the invention are also useful uses. ACH50865-ACH65260 represent the traget sequences of the invention. Note:

The sequence data for this patent was obtained in electronic format
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New probe array useful e.g. for monitoring gene expression levels, for analyzing genetic variations, or for hybridizing tag-labeled compounds, comprises multiple nucleic acid probes.
                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gene expression analysis, array, hybridisation, genetic variation, tag-labelled compound, gene family, in situ hybridisation, library screening, Southern hybridisation, northern hybridisation, dot-blot hybridisation, gene sequence; mutation detection, target sequence; probe; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA target sequence #12033 useful in array for genetic analyses.
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                                                                                  1.0%; Score 16.6; DB 1; Length 25; 82.6%; Pred. No. 3.9e+02; ive 0; Mismatches 4; Indels
                                            Sequence 25 BP; 4 A; 8 C; 11 G; 2 T; 0 U; 0 Other;
from USPTO at segdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 12033; 9pp; English
                                                                                                                                                                             555 CCTCAGCCGCCGCCTCGTG 577
                                                                                                                                                                                                                          24 ccccccaccccccrccrccrc 2
                                                                                                                                                                                                                                                                                                                                        ACH62897 standard; DNA; 25 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-AUG-2002; 2002US-00215112.
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                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                             Ouery Match
Best Local Similarity 82.67
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-576608/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MITT/) MITTMANN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JS2003082596-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                               17-OCT-2003
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                                                                                                                                                                                                                                                                                                                                                                                    ACH62897;
                                                                                                                                                                                                                                                                                           RESULT 174
ACH62897/c
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The invention relate to a method of diagnosing (M1) non-blood disease such as solid tumor by providing peripheral blood sample of human having non-blood disease, and comparing an expression profile of specific genes in the peripheral blood sample is differentially expressed in peripheral cance disease as in the peripheral blood sample is differentially expressed in peripheral blood mononuclear cells (PBMCs) of patients having the disease as compared to PBMCs of normal humans. The method is useful for diagnosing non-blood disease such as solid tumor. The solid tumor is chosen from renal cell carcinoma (RCC), prostate cancer and head/neck cancer. The peripheral blood sample comprises enriched PBMCs. The peripheral blood sample is a whole blood sample (claimed). (M1) is useful for identifying genes that are differentially expressed in peripheral blood samples isolated at different stages of progression, development or treatment of RCC and/or other solid tumors. This sequence corresponds to a probe to detect a gene that is differentially expressed and detected by the method of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                           ss; diagnosis; non-blood disease; solid tumor; gene expression; peripheral blood mononuclear cell; renal cell carcinoma; prostate cancer; head/neck cancer; differential expression; probe.
directly from the USPTO web site at segdata.uspto.gov/psipsDIDEntry.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Diagnosing non-blood disease such as solid tumor, involves comparing differential expression profile of specific genes in peripheral blood sample of subject with reference expression profile of specific genes.
                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dorner A, Stover JA;
                                                                                                            .
                                                                                                                                                                                                                                                                                                                                                                               Renal cell carcinoma differentially expressed gene probe #2090.
                                                                                                          Indels
                                                                          Length
                                   Sequence 25 BP; 6 A; 5 C; 7 G; 7 T; 0 U; 0 Other
                                                                   Query Match
1.0%; Score 16.6; DB 1;
Best Local Similarity 82.6%; Pred. No. 3.9e+02;
Matches 19; Conservative 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; SEQ ID NO 2421; 350pp; English.
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                                                                                                                                            1136 ACTACTCCACTCAGATTGACATG 1158
                                                                                                                                                                  25 ACTACCACACTCAGTGTGACATG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-NOV-2002; 2002US-0427982P.
03-APR-2003; 2003US-0459782P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-NOV-2003; 2003WO-US037481
                                                                                                                                                                                                                                                                    ADP15685 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                             26-AUG-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TWINE N C.
BURCZYNSKI M E.
TREPICCHIO W L.
DORNER A.
STOVER J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-460799/43.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004048933-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WYETH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-JUN-2004.
                                                                                                                                                                                                                                                                                                         ADP15685;
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Sloni DK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (AMHP)
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(BURC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (STOV/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DORN/)
                                                                                                                                                                                                                                  RESULT 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sloni
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 SXS
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Length 18;

0.9%;

Query Match

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primers AAV60743-V60745 were used to PCR amplify codons 1-163 of the human cyclin-dependent kinase 4 (hCDK4). The amplified product was used to compone a fusion protein comprising part of the hCDK4 sequence linked to codons 154-302 of the yeast PHO85 gene. The fusion protein is used to screen for compounds that affect mammalian cell cycle regulatory or compounds that affect mammalian cell cycle regulatory broteins. The method comprises administering a compound to a cell line, which contains a reporter gene linked to an Upstream Activation Sequence (UAS) and a promoter, where the UAS binds a transcription control factor (UAS) and a promoter, where the UAS binds a transcription control factor cycles which is regulated through cyclin/cyclin-dependent kinase (CDK) phosphorylation. Also included in the construct is an effector gene product to permit normal cyclin/CDK regulation of the TCF. Expression of the reporter gene is then analysed in the cell line, chareby determining whether the compound affects the normal regulation. The method can be used to identify inhibitors and activators of cyclin/CDK/CKI complexes, cyclin kinase inhibitors and activators of cyclin/CDK/CKI complexes. The identified agents can be used for stimulating growth of cells (as in wound healing), or regulating cyclin cycles in cancer therapy)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Screening for agents that effect cell cycle regulatory proteins - using a cell line that expresses a reporter gene in response to regulation through phosphorylation by a cyclin/CDK system.
                                                                                                                                                                                                                                                                                                                                                                                                                PCR primer; amplification; yeast; UAS; upstream activating sequence; transcription terminator; cell cycle; Upstream Activation Sequence; UAS; promoter; phosphorylation; cyclin; cyclin-dependent kinase; CDK; vector; cyclin kinase inhibitor; CKI; growth; wound healing; cancer therapy; ss.
                                                                                          Gaps
                                                                                          ..
0
                                                     Length 25;
                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
               BP; 6 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
                                                 1.0%; Score 16.6; DB 1;
12.6%; Pred. No. 3.9e+02;
ve 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                Primer #2 for human CDK4 codons 1-163.
                                                                                                                                  607 CTGGAGACCTACATTAAGCTGGA 629
                                                                                                                                                         25 CTGTAGACTGACATTAAGCAGGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 4; Page 75; 93pp; English
                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97WO-US018608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96US-0029127P
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                                                                        82.6%;
                                                                                                                                                                                                                                                                  AAV60744 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BITT-) BITTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-251302/22
                                                                      Local Similarity
les 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-OCT-1997;
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27-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9816660-A1
                   Sequence 25
                                                                                                                                                                                                                                                                                                                                           08-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bitter GA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                       AAV60744;
                                                       Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinases cher than cell-cycle dependent kinases cDK1, FCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                             Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:348.
                           Gaps
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94.4%; Pred. No. 3.3e+02;
ive 0; Mismatches 1; Indels
                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
Score 16.4; DB 1;
Pred. No. 3.2e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 51; 109pp; English.
                                                       1033 GACTITGGCCTGGCCCGA 1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1029 GGCTGACTTTGGCCTGGC 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                   cdk3 ribozyme binding site #47
                                                                       18 GACTTTGGCCTGGCCAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                    ВР
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                                                                                                                                                                                                                                                                                                                                                                                                     98US-0110954P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 94.4%;
nes 17; Conservative
            Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCTGACTTCGGCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH57924 standard; DNA; 19
                                                                                                                                                    AAA82762 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-SEP-2001 (first entry)
                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-412314/35
                                                                                                                                                                                                                                                                                                                                                                                                                               (IMMU-) IMMUSOL INC
                                                                                                                                                                                                                                                                                                                     WO200032765-A2.
                                                                                                                                                                                                                                                                                                                                                                           06-DEC-1999;
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                                                                                                                                                                                                           04-DEC-2000
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                                                                                                                                                                                 AAA82762;
                                                                                                                                                                                                                                                                                          Mammalia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tritz R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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                                                                                                                            RESULT 177
                                                                                                                                       AAA82762
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recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloprotesinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dermatological, cytostatic, antisebornheic, antidiabetto, antisickling, ophthalmological, cytostatic, antisebornheic, antidiabetto, antisickling, ophthalmological, cytostatic, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin squamous or basal cell carcinoma and viral or sebornheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a mincleic acid segment encoding (I). (I) can have antipsoriatic,
Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 16.4; DB 1; Length 19;
44.4%; Pred. No. 3.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 97; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1029 GGCTGACTTTGGCCTGGC 1046
                                                                                                                                                                                                                                                                                                                                                                                       26-OCT-2000; 2000WO-US029500.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Robbins JM, Tritz R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-300427/31
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                                                                                                                                                                                                                                                                                                      WO200130362-A2
                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                  26-OCT-1999;
                                                                                                                                                                                                                                                                                                                                               03-MAY-2001.
                                                                                                                                                                                                                                                             Synthetic.
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Matches
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AAZ18127
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (c) determining in the selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is cransformed. They can be used for determining the an individual, e.g. a fetus. They can also be used for determining cells capable of expressing an homeobox related desired containing cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected of gene family. Sequences AA217803-218342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, encourted in the RT-PCR reactions contained from a set of homeobox genes, kinase genes, encourted in the RT-PCR reactions of the selected from a set of homeobox genes, kinase genes, encourted in the RT-PCR reactions of the selected from a set of server of serverse contains the genes, steroid receptor
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                                     Genetic proximity, gene expression, cell characterisation, homeobox gene, genetic defect, reverse transcriptase polymerase chain reaction, RT-PCR, kinase gene, protein phosphatase, P450, steroid receptor, cadherin,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Identifying and characterizing cells by comparing the pattern of gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 4; Page 44; 102pp; English.
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                                                                                                                                                                                                                                                                                                98WO-IL000625.
                                                                                                                                                                                                                                                                                                                                            97IL-00122793
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STK 3 gene specific primer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-419113/35.
                                                                                                                                                                                                                                                                                                                                                                                                    (GENE-) GENENA LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P-PSDB; AAY14662
                                                                                                                                                                                                                                                                                              28-DEC-1998;
                                                                                                                                                                                                                                                                                                                                          29-DEC-1997;
                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                              WO9934016-A2
                                                                                                                                                                                                                                                                                                                                                              16-OCT-1998;
                                                                                                                                                                                                                                                      08-JUL-1999.
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                                                                                                      primer; ss.
                                                                                                                                                Synthetic.
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and as ascond cell comprises: (a) obtaining the first cell and the second cell comprises: (a) obtaining the first cell and the second cell chermining in the first cell and the second cell the pattern of expression of genes in a selected gene family; and (c) calculating a profiled formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its constitution of a selected for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for determining the effect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired continuing the method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected continuing the pattern of gene expression in a selected continuing the pattern of gene expression. The continuing the pattern of genes, steroid receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genetic proximity; gene expression; cell characterisation; homeobox gene; genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR; kinase gene; protein phosphatase; P450; steroid receptor; cadherin; primer; 85.
genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR; kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Identifying and characterizing cells by comparing the pattern of gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 16.4; DB 1; Length 20;
4.4%; Pred. No. 3.5e+02;
ve 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        superfamily genes or cadherin superfamily genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 4; Page 45; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        972 ACACCGAGACCTCAAGCC 989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ18141 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                                              97IL-00122793
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STK 10 gene specific primer.
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Best Local Similarity 94.4'
Marches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-419113/35.
                                                                                                                                                                                                                                                                                                                                        (GENE-) GENENA LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                              P-PSDB; AAY14690
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                                                                                                                Homo sapiens
                                                                                                                                                       WO9934016-A2
                                                                                                                                                                                                                                       28-DEC-1998;
                                                                                                                                                                                                                                                                                                 16-OCT-1998;
                                                                                                                                                                                                                                                                              29-DEC-1997;
                                                                                                                                                                                              08-JUL-1999
                                                   primer; ss
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                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                 Vider B;
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell computes: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its characterising cells, e.g. a fetus. They can also be used for determining the rindividual, e.g. a fetus. They can also be used for determining the cffect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AA217803-218342 represent primers that can be used to the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, protein phosphatase genes, P450 enzyme genes, streroid receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiinsthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                   Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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Pred. No. 3.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; B A; 9 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   superfamily genes or cadherin superfamily genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4; Page 44; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABZ93276 standard; DNA; 20 BP
                                                                                                                                                        98WO-IL000625.
                                                                                                                                                                                          97IL-00122793.
98IL-00126627.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.9%;
Best Local Similarity 94.4%;
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                  WPI; 1999-419113/35
                                                                                                                                                                                                                                                        (GENE-) GENENA LTD
                                                                                                                                                                                                                                                                                                                                                       P-PSDB; AAY14676
                                    Homo sapiens.
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                                                                            WO9934016-A2.
                                                                                                                                                        28-DEC-1998;
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                                                                                                                                                                                                               16-OCT-1998;
                                                                                                                   08-JUL-1999
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                                                                                                                                                                                                                                                                                           Vider B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 182
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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end ganomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an intifflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung inflammation, lung allergies, or a respiratory disease or condition, luct: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from NIPO.
                                                                                                                                                                                                                                                                                                                                                              Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; SEQ ID NO 8518; 872pp; English
                                                                                                                                                                                                                                                      Li Y, Sandrasagra A, ka
Tang L, Shahabuddin S;
                                                                                                                            23-APR-2002; 2002WO-US013135.
                                                                                                                                                                      24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                              (EPIG-) EPIGENESIS PHARM INC.
                                                                                                                                                                                                                                                                                                                      WPI; 2003-229219/22.
                                          WO200285308-A2
  Homo sapiens.
                                                                                    31-OCT-2002
                                                                                                                                                                                                                                                    Nyce JW, I
Miller S,
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Katz E, Pabalan J, Aguilar D;

0.9%; Score 16.4; DB 1; Length 20; 14.4%; Pred. No. 3.5e+02; ve 0; Mismatches 1; Indels Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other; Query Match Best Local Similarity 94.4%; Matches 17; Conservative

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Gaps

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1087 GIGGIGACACIGIGGIAC 1104 20 Gregreacacrerected ð

ABD29506 standard; DNA; 20 BP 29-JUL-2004 (first entry) ABD29506; RESULT 183 ABD29506,

AA664176-derived oligonucleotide SEQ ID 8518.

analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta adrentatic agonist; respiratory disease; pulmonary vasconstriction; respiratory distress syndrome; allergic thinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; Human, antisense; bronchoconstriction, allergy, hyposecretion, pain, respiratory tract inflammation; adenosine sensitivity; lung, cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;

analgasic, hypotensive, immunosuppressive and cytostatic activity, is beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or maliganat disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or bronchoconstriction are associated inflammation, allergies and/or surfactant hypoproduction are associated inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary cransplantation rejection, pulmonary infections, bronchities or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of comprising oligonucleotides, effective for alleviating brochoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligomoleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it the oligonucleotides into products that free adenosine into the system This invention describes a novel composition (a) a first active agent, oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent. Pabalan J, Aguilar D; Pharmaceutical composition for treating asthma, has antisense Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other; pulmonary transplantation rejection; ss; primer. Katz E, Claim 15; SEQ ID NO 8518; 763pp; English. Li Y, Sandrasagra A, Ka Tang L, Shahabuddin S; 23-APR-2002; 2002WO-US013143. 24-APR-2001; 2001US-0286036P. (EPIG-) EPIGENESIS PHARM INC. WPI; 2003-093058/08. WO200285309-A2. Homo sapiens. 31-OCT-2002 Miller S, ¥,

Gaps ö 0.9%; Score 16.4; DB 1; Length 20; 44.4%; Pred. No. 3.5e+02; Indels 0; Mismatches 94.48; Best Local Similarity 94.4 Matches 17; Conservative Query Match

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ADI28140 standard; DNA; 20 BP. AD128140 ADI28140/c ID ADI281 XX AC ADI281 RESULT 184

Human; antisense gene therapy; ss; PRL3; protein tyrosine phosphatase type IVA member 3; colorectal cancer; diabetes; glucose tolerance; insulin resistance; obesity; hyperproliferative disorder; cytostatic.

20-JUN-2002; 2002US-00177554. 20-JUN-2002; 2002US-00177554.

US2003235911-A1. Homo sapiens.

25-DEC-2003

(ISIS-) ISIS PHARM INC.

Zhang H;

Dobie KW,

WPI; 2004-070585/07.

Human PRL3 antisense target region #20.

(first entry)

22-APR-2004

ADI28276:

AD128276 standard; cDNA;

RESULT 185

4DI28276

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The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL-3), that specifically hybridises with the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluent, inhibiting the suspected of PRL-3 in cells or tissues, treating an animal having or suspected of haring a disease or condition associated with PRL-3 and screening for an antisense compound. The antisense oligonucleotide is useful for preparing a composition for treating hyperproliferative disorder, particularly cancer ((e.g. colorectal cancer), diabetes, reduced glucose tolerance, insulin resistance and obesity. The present sequence is an antisense oligonucleotide targeting human PRL3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotide, comprising a sequence targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL -3), useful for preparing a composition for treating hyperproliferative disorders, e.g., cancer.
                                                                                                                                                                                                                                                                     /note= "Phosphorothioate backbone and all cytidines are -methyl cytidines"
                                                                                 Human; antisense gene therapy; ss; PRL3; protein tyrosine phosphatase type UVA member 3; colorectal cancer; diabetes; glucose tolerance; insulin resistance; obesity; hyperproliferative disorder; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.9%; Score 16.4; DB 1; Length 20; 34.4%; Pred. No. 3.5e+02; ive 0; Mismatches 1; Indels
                                                Antisense oligonucleotide targeting human PRL3 ISIS 217467
                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER
/mote= "2'-methoxyethyl residues"
16. .20
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/note= "2'-methoxyethyl residues"
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                                                                                                                                                                                                      Location/Qualifiers
1. .20
/*tag= b
                                                                                                                                                                                                                                                           /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-JUN-2002; 2002US-00177554.
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                  22-APR-2004 (first entry)
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New antisense oligonucleotide, comprising a sequence targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL -3), useful for preparing a composition for treating hyperproliferative disorders, e.g., cancer.

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The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL-3), that specifically hybridises with the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluent, inhibiting the expression of PRL-3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with PRL-3 and screening for an antisense compound. The antisense oligonucleotide is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              useful for preparing a composition for treating hyperproliferative disorder, particularly cancer ((e.g. colorectal cancer), diabetes, reduced glucose tolerance, insulin resistance and obesity. The present sequence is a Human PRL3 cDNA AO target region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Farnesoid X receptor gene expression antisense inhibitory oligo #2062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 16; SEQ ID NO 183; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120 CGCCATGGATCGGATGAA 137
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120 19

94.48;

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CGCCATGGCTCGGATGAA

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. dyslipidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein) or hypercholesterolemia, gallstones, hypertriglyceridemia, obesity, neurological disorders, or ischemia, reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence corresponds to an antisense oligonucleotide of the
                                 neuroprotective; vasotropic; antisense; gene therapy.
Farnesoid X receptor; diabetes; immunological disorder;
Farnesoid X sorder; dyalipidemia; atherosclerosis;
high density lipoprotein; low density lipoprotein; hypercholesterolemia;
gallstones; hypertriglyceridemia; obesity; neurological disorder;
ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides useful for modulating expression of farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders, gallstones or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Farnesoid X receptor gene expression antisense inhibitory oligo #1880.
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ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic;
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4.4%; Pred. No. 3.5e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; SEQ ID NO 2062; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1658 ACACCCCTCACAGGCAG 1675
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                                                                                                                                                                                                                    WO2004030750-AL
                                                                                                                                                                               Homo sapiens
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dyslipidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hypertriglyceridemia, obesity, neurological disorders, or ischemia/reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence corresponds to an antisense oligonucleotide of the
high density lipoprotein; low density lipoprotein; hypercholesterolemia; gallstones; hypertriglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetes; immunological disorder; cardiovascular disorder; dyslipidemia; atherosclerosis; high density lipoprotein; low density lipoprotein; hyperrological disorder; gallstones; hypertriglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Farnesoid X receptor gene expression antisense inhibitory oligo #1983.
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94.4%; Pred. No. 3.5e+02;
Ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; SEQ ID NO 1880; 150pp; English.
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                                                                                                                                                                                                                                       25-SEP-2002; 2002US-0413588P.
                                                                                                                                                                                                25-SEP-2003; 2003WO-US030353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACACCCCTCACAGGTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADO54610 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 94.4
                                                                                                                                                                                                                                                                         (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                      e.g. diabetes, immunol
gallstones or obesity.
                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-347928/32.
                                                                                                                     WO2004030750-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JUL-2004
                                                                                                                                                            15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                  Kane CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 188
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Homo sapiens

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The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. dyslipidemia and its symptoms, atheroscierosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hypertriglyceridemia, obesity, neurological disorders, or ischemia/reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence corresponds to an antisense oligonucleotide of the
                                                                                                                                                                                                                                                                              Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders,
                                                                                                                                                                                                                                                          New antisense oligonucleotides useful for modulating expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; AIB1; amplified in breast cancer 1; androgen receptor; AR; prostate cancer; exon 1; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human androgen receptor (AR) gene exon 1 amplifying primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.9%; Score 16.4; DB 1; Length 20; Best Local Similarity 94.4%; Pred. No. 3.5e+02; Matches 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                 Claim 4; SEQ ID NO 1983; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1658 ACACCCCTCACAGGGCAG 1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 ACACCCCTCACAGGTCAG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-JUL-2000; 2000US-0221074P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-JUL-2001; 2001WO-US023834.
                                                                                   25-SEP-2003; 2003WO-US030353
                                                                                                                     25-SEP-2002; 2002US-0413588P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD30434 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                    (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                  e.g. diabetes, immunol
gallstones or obesity.
                                                                                                                                                                                                                         WPI; 2004-347928/32.
              WO2004030750-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                  15-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  invention.
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                                                                                                                                                                                          Kane CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 189
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                                                                                                                                                                                          The invention relates to a method for assessing the risk of prostate cancer in a human subject. The method involves determining the length of the contiguous CAG or CAA repeats in both AIBI (Amplified In Breast cancer 1) gene alleles or contiguous CAG, CAA or GAN repeats in the androgen receptor gene of the subject. The method is useful for assessing as subject's risk for acquiring or developing prostate cancer. The present sequence is a PCR primer used to amplify human androgen receptor (AR) gene exon 1 and is used in the molecular analysis and assessment of the
                                                                    Assessing the risk of acquiring or developing prostate cancer in a human subject, comprises determining the length of the contiguous CAG, CAA and/or {\tt GGN} repeats in the AIB1 gene and/or androgen receptor gene of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; cross-species comparison.
                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                         Score 16.4; DB 1; Length 24; Pred. No. 4.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human microarray DNA oligonucleotide SEQ ID NO 40306.
                                                                                                                                                                                                                                                                                                                                                                        Sequence 24 BP; 3 A; 13 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 40306; 9pp; English.
                                                                                                                                                           Claim 39; Page 42; 86pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  554 CCCTCAGCCGCCGCCTCC 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 cccrcadccdccdcrrcc 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
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                                                                                                                                                                                                                                                                                                                                                                                                         ch 0.9%;
1 Similarity 94.4%;
17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                       GGN repeat of AR gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-567953/53.
                                   WPI; 2002-206195/26.
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mittmann MP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-OCT-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACI40315;
Chang C;
                                                                                                                           subject
                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACI40315,
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Gaps

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in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target sequence. The method of analysis comprises thybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dottor hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA melecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the contained in the microarray. Note: The sequence of the form the patent can also be obtained in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USPTO at segdata.uspto.goc/sequence.html
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Sequence 25 BP; 2 A; 8 C; 7 G; 8 T; 0 U; 0 Other;

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Gaps
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0.9%; Score 16.4; DB 1; Length 25;
14.4%; Pred. No. 4.3e+02;
ve 0; Mismatches 1; Indels
               94.48;
                              17; Conservative
               Local Similarity
Query Match
                Best Loca
Matches
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977 GAGACCTCAAGCCCCAGA 994 GAGACCICIAGCCCCAGA 1

AAS11083 standard; DNA; 21 **AAS**11083

BP

AAS11083;

(first entry) 24-OCT-2001

Bacterial 16s RNA antisense oligomer #49.

Antisense; bacterial 16s ribosomal RNA; rRNA; bacterial infection; human; food grain supplement; livestock; poultry; therapeutic; ss.

Streptococcus pneumoniae

WO200142457-A2.

14-JUN-2001.

29-NOV-2000; 2000WO-US042391.

99US-0168150P. 29-NOV-1999;

AVIB-) AVI BIOPHARMA INC

versen PL;

WPI; 2001-457295/49.

Antibacterial compound, useful for treating bacterial infections and as livestock and poultry food supplement, comprises antisense oligonucleotides complementary to bacterial 16S and 23S rRNA.

Disclosure; Page 28; 62pp; English

The invention relates to a replicase complex comprising a hepatitis C virus (HCV) NSSB replicase protein, a linear nucleic acid template and a complementary nucleic acid primer which is amnealed to the 3' terminus of the template, where the template is at least three nuclectides and the primer is two or three nuclectides, and the template and primer do not form a stable duplex in solution in the absence of the HCV NSSB protein. The complex is useful for detecting HCV replicase activity and permits can establishment of sensitive RNA-dependent RNA polymerase assays to screen establishment of sensitive RNA-dependent RNA polymerase assays to screen and evaluate antiviral inhibitors and to improve the specificity and cfficacy of the inhibitors. The complex is also useful in the development of a reliable system for determining kinetic and thermodynamic constants of a reliable system for determining kinetic and investigation of mechanistic inhibitors for mis-incorporation or chain termination. Specifically, the short RNA template and primer pairs are useful in screening assays which are used for determining kinetic, thermodynamic and mechanistic properties of NSSB replication and ultimately in the development of inhibitors of RNSSB. Newly identified inhibitors of replicase activity may be used for developing anti-HCV pharmaceuticals.

nucleotide-long template to which a 2 nucleotide-long primer is annealed, and template and primer which do not form a stable duplex in the absence Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3

Zhong W, Hong Z, Ferrari E;

WPI; 2002-582330/62.

Example; Page 6; 17pp; English.

of HCV NS5B

ribosomal RNA (TRNA) antisense oligomers. These sequences are antibacterial compounds comprising substantially uncharged antisense oligomers containing 8-40 nucleotide subunits, including a targeting nucleic acid sequence at least 10 nucleotides in length which is complementary to a bacterial 16S or 23S TRNA nucleic acid sequence. The antisense oligomers are used for treating a bacterial infection in a human or a mammalian animal produced by Escherichia coli, Salmonella AAS11035-AAS11157 represent the coding sequences of bacterial 16S

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typhimurium, Pseudomonas aeruginosa, Vibrio cholera, Neisseria monorrhoea, Helicobacter pylori, Bartonella henselae, Haemophilus influenza, Shigalla dysenterae, Staphylococcus aureus, Mycobacterium tuberculosis, Streptococcus pneumoniae, Treponema palladium and Chlamydia trachomatis. The antibacterial compound may be used as a food grain supplement in livestock and poultry food composition
                                                                                                                      Gaps
                                                                                                                                                                                                                                                                              Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #26.
                                                                                                                    ;
                                                                                             0.9%; Score 16.2; DB 1; Length 21; 85.7%; Pred. No. 4e+02;
                                                                                                                                                                                                                                                                                                    Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
                                                                          Sequence 21 BP; 6 A; 7 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                        Pred. No. 4e+02;
0; Mismatches
                                                                                                                                        1439 ATGCCATGAAACATCCATTCT 1459
                                                                                                                                                      1 ATGTCATGCAACATCCACTCT 21
                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                       06-APR-2001; 2001US-00828034
                                                                                                                                                                                                                                                                                                                                                                                                             07-APR-2000; 2000US-0195852P.
                                                                                                                                                                                                                 ABK99296 standard; RNA; 21
                                                                                                                                                                                                                                                          (first entry)
                                                                                                                    Conservative
                                                                                                       Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (FERR/) FERRARI E.
                                                                                                                                                                                                                                                                                                                                                                                                                                  (ZHON/) ZHONG W.
                                                                                                                                                                                                                                                                                                                                              US2002064771-AL
                                                                                                                                                                                                                                                          21-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                   30-MAY-2002.
                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                      ABK99296;
                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                            (/SNOH)
                                                                                                                                                                                            RESULT 192
                                                                                                                                                                                                       ABK99296,
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                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
                                                                                                                                    Gaps
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0.9%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 46+02;
Matches 18; Conservative 0; Mismatches 3; Indels
                                                                                          Score 16.2; DB 1; Length 21; Pred. No. 4e+02;
                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                             Human chromosome 1p36-35 PCR primer SEQ ID NO:1465.
                                                          0 G; 0 T; 0 U; 0 Other;
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                                                                                                                                      0; Mismatches
                                                                                                                                                                          230 GIGGIGGIGGIGGCAGIG 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 4; Page 33; 528pp; Japanese.
                                                                                                                                                                                                              crecrecrecrecrecre
                                                                                                                                                                                                                                                                                                                ABL44421 standard; DNA; 21 BP
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                                                                                              0.9%;
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                                                          Sequence 21 BP; 7 A; 14 C;
                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                      18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Arraying genome clones.
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                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JP2001321190-A
                                                                                                                                                                                                                                                                                                                                                                                        11-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-NOV-2001
                        templates
                                                                                                                                                                                                              21
                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human;
                                                                                                                                                                                                                                                                      Matches
      88333
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Inferring genetic pigmentation trait such as hair/eye color or shade from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention comprises a method for inferring a genetic pigmentation trait of a human. The method involves identifying a single nucleotide polymorphism (SMP) in a pigmentation gene - where the pigmentation gene is not melanocortin-1 receptor (MCIR) and agouti signaling protein (ASIP). The method of the invention is useful for inferring a genetic pigmentation trait of a human, especially for inferring the race of a human subject. The method is useful for inferring a genetic pigmentation trait such as hair shade or colour, or eye shade or colour of a human subject. The method may be used as a forensic tool for obtaining subject. The method physical characteristics of a potential orime information relating to physical characteristics of a potential orime information relating to physical characteristics of a potential orime
                                                                                                                                                                                                                                                                                       Human; single nucleotide polymorphism; SNP; ss; melanocortin-1 receptor; genetic pigmentation trait; MCIR; agouti signaling protein; ASIP; race; hair colour; eye colour; forensic tool; PCR; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            victim or a perpetrator of a crime from a nucleic acid sample present at a crime scene. The present PCR primer is used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic acid sample of human subject, by identifying a pigmentation-
related haplotype allele of a pigmentation gene in the sample.
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0
                                                                                                                                                                                                                                                    Human pigmentation trait-related PCR primer - SEQ ID No 213.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 16.2; DB 1; Length 21; larity 85.7%; Pred. No. 4e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21 BP; 5 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 17; Page 248; 396pp; English.
1140 CICCACTCAGATTGACATGTG 1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               863 TGAAGCAGTACCTGGATGACT 883
                                1 Crccacrcagrardacarcrg 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 reaagcagracaregereagr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNAP-) DNAPRINT GENOMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-JUN-2001; 2001US-0300187P.
17-SEP-2001; 2001US-0310781P.
17-SEP-2001; 2001US-033662P.
26-OCT-2001; 2001US-0346418P.
15-NOV-2001; 2001US-0334674P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-MAY-2002; 2002WO-US016789.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-JAN-2002; 2002US-0346303P
                                                                                                                                     ABT34114 standard; DNA; 21
                                                                                                                                                                                                               29-MAY-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-239091/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                WO200297047-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention
                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Frudakis T;
                                                                                                                                                                            ABT34114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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Matches
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Gaps ö 1 AGTCGCAGAACCTGCTCATTA 21

BP.

ADJ13145 standard; DNA; 21

RESULT 196

ADJ13145

(first entry)

20-MAY-2004

ADJ13145;

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The present invention describes a predictor set comprising a plurality of polynucleotides or polypeptides whose expression pattern is predictive of the response of cells to treatment with a compound that modulates protein tyrosine kinase activity or members of the protein tyrosine kinase characteristics of modulating the activity of cells, comprising obtaining a sample of cells, modulating the activity of cells, comprising obtaining a sample of cells, correlating the expression of the markers to the compound's ability to modulate the activity of the cells; (2) a plurality of cell lines for correlating the activity of the cells; (2) a plurality of cell lines for dentifying polynucleotides and polypeptides whose expression levels correlate with compound sensitivity or resistance of cells associated with a disease state, comprising subjecting the plurality of associated with a disease state, comprising subjecting the plurality of cell lines to one or more compounds, analysing the expression pattern of a microarray of polypeptides that predict the sensitivity or resistance of cells associated with a disease state by using the expression pattern of the microarray. The polynucleotides and collypeptides that predict the sensitivity or resistance of cells associated with a disease state by using the expression pattern of the microarray. The polynucleotides and collypeptides that predict has been been been considered with a disease state by using the expression pattern of the microarray. The polynucleotides and collyperides have cylostatic activities, and can be used in gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The polynucleotides and polypeptides are useful in predicting the activity of compounds that interact with protein tyrosine kinases and/or protein tyrosine kinase pathways. These may be used in determining drug sensitivity in patients to allow the development of individualized genetic profiles which aid in treating diseases and disorders (e.g. cancer) based on patient response at a molecular level. The present sequence is used in the exemplification of the present invention.
                                                                                                                                                                                                                                        predictor set; protein tyrosine kinase activity modulator; protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic; gene therapy; drug sensitivity; genetic profile; cancer; human; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polynucleotides and polypeptides for predicting the activity of compounds that interact with protein tyrosine kinases and/or protein
                                                                                                                                                                                               Human src biomarker reverse PCR primer SEQ ID NO:756.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 2; SEQ ID NO 756; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BRIM ) BRISTOL-MYERS SQUIBB CO
                                                ADD14567 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-JAN-2003; 2003WO-US001981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-JAN-2002; 2002US-0350061P.
                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tyrosine kinase pathways.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Huang F, Fairchild CR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-636735/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003062395-A2
                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                               01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                 ADD14567;
RESULT 195
                         ADD14567
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Shaw P;

Lee FY,

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This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CPG island. In
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Analysis of chemical modification of DNA involves obtaining sample of DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene p16 from two human lung tumour cell lines H69 and H618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to be analyzed, treating DNA with chemical reagents that result in
different base sequences, and determining sequence of resulting DNA.
                                                                                                                                          probe; ss; chemical modification; methylation; array; CpG island; tumour suppressor; p16; human; H69; H1618.
                                                                                                        Human DNA probe used to immobilise CpG methylated DNA SegID 272.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.9%; Score 16.2; DB 1; Length 21; llarity 85.7%; Pred. No. 4e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 4 A; 12 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Balog RP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; SEQ ID NO 272; 210pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               221 TGGATGAGAGTGGTGGTG 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Luebke KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 TGGATGAGAGTGGGAGAGGTG 1
                                                                                                                                                                                                                                                                                                              27-JUN-2002; 2002US-00184085.
                                                                                                                                                                                                                                                                                                                                                   27-JUN-2001; 2001US-0301370P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAI66678 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minna JD,
                                                                                                                                                                                                                                                                                                                                                                                   (GARN/) GARNER H R.
(MINN/) MINNA J D.
(LUEB/) LUEBKE K J.
(BALO/) BALOG R P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-874843/81.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
es 18; Conserv
                                                                                                                                                                                                                                       US2003152950-A1
                                                                                                                                                                                                                                                                         14-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Garner HR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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Query Match Best Local Similarity 85.7° Matches 18, Conservative

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Human, antisense, lung dysfunction, nasal airway dysfunction, antisinflammatory steroid, ubiquinone, antisinflammatory, antiallergic; antiasthmatic; hypotensive, immunosuppressive, cytostatic; gene therapy, antisense gene therapy, respiratory, lung, adenosine sensitivity, adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human PDE4A-MTA oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              232 GGTGGTGGTGGCGCAGTGAC 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22 geregregregeseaacreac
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BMLB-) BML INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200285308-A2.
                                                                                                                                                                                                                                                                                                                         WO200171032-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-0CT-2003
                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matsuzawa Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                        27-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nagano M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABZ99041;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
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XX
AC ABZ9
XX
DY 17-0
XX
DX Huma
XX
KW Huma
KW ant:

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 in a subject that involves detecting mutations in the gene for cholesterol ester transfer protein (CETP) related to the degree of risk of arteriosclerosis. The mutant proteins alter the level of HDL in the blood. The high frequency mutations can be detected for prevention and treatment of arteriosclerosis. Sequences Al166655-91 represent PCR primers related to the human CETP DNA, used during the course of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yamashita S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Determining a risk factor for arteriosclerosis comprises detecting mutations in genes for cholesterol ester transfer protein.
                                                                                                                                           cholesterol ester transfer protein; HDL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Egashira T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 22 BP; 5 A; 12 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                            high density lipoprotein; human; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sagehashi Y, Hattori H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 20; 58pp; Japanese
                                                                     Human CETP DNA related PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-MAR-2001; 2001WO-JP002327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-MAR-2000; 2000JP-00084264
07-JAN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 85.7
Matches 18; Conservative
                                                                                                                                               arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-611516/70.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ito M,
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first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' end 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a immunosuppressive, and cytostatic activity. The composition may have a come in antisense gene therapy. The composition may have a composition and succeeding the prophylactic or therapeutic respiratory effect of an entiinflammatory steroid in a subject, for reducing or depleting levels of or entiinflammatory sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung inflammation, lung allergies, or a respiratory disease or condition. The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO

Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;

at ftp.wipo.int/pub/published_pct_sequences

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

Disclosure, SEQ ID NO 14283; 872pp; English.

ubiquinone

ä

Aguilar

Pabalan J,

Katz E,

i Y, Sandrasagra A, K Tang L, Shahabuddin S;

Li Y,

Nyce JW, I Miller S,

WPI; 2003-229219/22.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P (EPIG-) EPIGENESIS PHARM INC

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                                                                                                                                                                                                                                                                                                                            Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory districtses syndrome; allergic rhinitis; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
                                     Gaps
                                   0;
Score 16.2; DB 1; Length 22;
Pred. No. 4.1e+02;
                                  Indels
                                                                                                                                                                                                                                                                                               Human PDE4A-MTA-derived oligonucleotide SEQ ID 14283.
                                     0; Mismatches
                                                                      535 AGCCCCATCTTGACAAGCCC 555
                                                                                                      22 AGCCCCATGTGACAAGCAC 2
                                                                                                                                                                                            BP.
   0.9%;
                                                                                                                                                                                            ABD32072 standard; DNA; 22
                                                                                                                                                                                                                                                               (first entry)
                   Local Similarity 85.7
Les 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200285309-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                               29-JUL-2004
                                                                                                                                                                                                                               ABD32072;
   Query Match
                                                                                                                                                            RESULT 199
                                     Matches
                                                                                                                                                                              ABD32072,
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disease e.g., asthma.
                                                                                                                                                                                                                                                          WPI; 2004-203534/19.
                                                                                       WO2004011613-A2
                                                                Homo sapiens
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                                                                                                                  05-FEB-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inflammation, allergies, asthem, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary bypertension, emphysem, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonuclectides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
                                                                                                                                                             Pharmaceutical composition for treating asthma, has antisense oligonuclectide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                    Pabalan J, Aguilar D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
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15.7%; Pred. No. 4.1e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                             Claim 15; SEQ ID NO 14283; 763pp; English.
                                                                                                    Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide associated to PDE4D #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  535 AGCCCCATCTTTGACAAGCCC 555
                                                                                                               Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCCCATGTGTGACAAGCAC 2
                                                                                                    Sandrasagra A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                         23-APR-2002; 2002WO-US013143.
                                                  24-APR-2001; 2001US-0286036P.
                                                                        (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          85.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 85.7
nes 18; Conservative
                                                                                                                                                                                                     bronchodilating agent.
                                                                                                Li Y, Sand
Tang L,
                                                                                                                                        WPI; 2003-093058/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-MAY-2004
31-OCT-2002
                                                                                                   Nyce JW,
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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interleukin; IL-4 receptor; IL-5 receptor; lung disease;

M X B X B X B X X B X B

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            useful for production of a medicament for the prevention and/or treatment of a respiratory or lung disease. The respiratory or lung disease is chosen from airway inflammation, allergy(ies), asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases (CDD), allergic rhinitis (AR), acute respiratory distress syndrome (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway obstruction. The present sequence represents an oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             initiation codons and introns of respiratory disease-relevant genes e.g., CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to an oligonucleotide anti-sense to e.g., initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-end of nucleic acid target comprising gene (s) chosen from e.g. interleukin (II)-4 receptor, IL-5 receptor or salts of the oligonucleotide and optionally surfactant operatively linked to the oligonucleotide. The method is useful for preventing or treating a respiratory or lung disease, which involves administering to the airways of a subject an effective amount of an inhibitor. The oligonucleotide is
airway inflammation; allergy; asthma; impeded respiration;
cystic fibrosis; acute respiratory distress syndrome;
pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           interleukin; IL-4 receptor; IL-5 receptor; lung disease; airway inflammation; allergy; asthma; impeded respiration; cystic fibrosis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel single or multiple target oligonucleotide anti-sense to e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Miller S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Aguilar D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligonucleotide associated to PDE4A #207.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 2; SEQ ID NO 2156; 85pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              535 AGCCCCATCTTGACAAGCCC 555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nyce JW, Tang L, Sandrasagra A,
Shahabuddin S, Lu H, Cong H;
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                                                                                                                                                                                                                                                                                                                                                                  25-JUL-2003; 2003WO-US023509
                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JUL-2002; 2002US-0399076P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (EPIG-) EPIGENESIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 85...
-hes 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADJ60924 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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US2004049022-A1

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The present invention relates to an oligonucleotide anti-sense to e.g., initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-end of or comprising gene (s) chosen from e.g. interleukin (IL)-4 receptor, IL-5 receptor or salts of the oligonucleotide and optionally surfactant operatively linked to the oligonucleotide. The method is useful for preventing or treating a respiratory or lung disease, which involves administering to the airways of a subject an effective amount of an inhibitor. The oligonucleotide is useful for production of a medicament for the prevention and/or treatment of a respiratory or lung disease. The respiratory or lung disease is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chosen from airway inflammation, allergy(ies), asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases (COPD), allergic rinitis (AR), acute respiratory distress syndrome (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway obstruction. The present sequence represents an oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                              Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codons and introns of respiratory disease-relevant genes e.g., CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR3; Ectaxin-1; RANTES; MCP4; CD23; ICAM, VCAM, tryptase a; tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; DEE4 B; DEE4 C; PDE5 B; DEE4 C; PDE5 B; DEE4 C; PDE5 B; DEE5 C; asthma; lung disease; hyper-responsivenees; adenosine, adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; alway inflammation; allergy; impeded respiration; cystic fibrosis; CF; chronic obstructive pulmonary disease; COPD; allergic rhinitis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 16.2; DB 1; Length 22; 85.7%; Pred. No. 4.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                        Aguilar D, Miller S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 2; SEQ ID NO 1780; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           535 AGCCCCATCTTTGACAAGCCC 555
                                                                                                                                                                                                                                                          Nyce JW, Tang L, Sandrasagra A,
Shahabuddin S, Lu H, Cong H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22 AGCCCCATGTGTGACAAGCAC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADO46413 standard; DNA; 22 BP
                                                                                                                            25-JUL-2003; 2003WO-US023509
                                                                                                                                                                       39-JUL-2002; 2002US-0399076P
                                                                                                                                                                                                                  (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human oligonucleotide #1779.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                      disease e.g., asthma.
                                                                                                                                                                                                                                                                                                                       WPI; 2004-203534/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                        WO2004011613-A2.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JUL-2004
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                                                                                   05-FEB-2004
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                                                                                                                                                                                                                                                                                                                                                                  Novel
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ADO46413/C
ID ADO46
XX
AC ADO46
XX
DE Humai
XX
KW Humai
XW CRI
KW CCRI
KW LTYP
KW IUNG
XW GALT
KW GALT
COS HOMC
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The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-5 receptor, CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, ITYPIASE a, ITYPIASE b, PDE4 B, PDE4 C or PDE4 D. The invention also relates to a method of screening a candidate compound that binds to one or more nucleic acid target(8) or expressed product(8), for the prevention and/or treatment of a respiratory or lung disease. The coligonucleotides are useful for reducing or inhibiting expression of a gene or mRNA encoding interleukin-5 receptor, CCR1, CCR3, EOTAXIN-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are useful for preventing or treating a respiratory or lung disease. The respiratory or lung disease is associated with hyper-responsiveness to and/or increased levels of adenosine and/or increased levels of adenosine and/or increased levels of adenosine and/or increased levels of a respiratory or lung disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codon, intron of respiratory disease-relevant gene e.g. CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           receptor(s), and/or asthma and/or lung allergies associated with inflammation or an inflammation disease. The respiratory or lung disease, is chosen from airway inflammation, allergy, asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD), allergic rhinitis, acute respiratory distress syndrome, pulmonary hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                      Aguilar D, Miller S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; SEQ ID NO 1780; 174pp; English.
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                                                                                                                                                                                                                                                                                                                                                                        Sandrasagra A, Tang L,
in S, Lu H, Cong H;
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                                                                                            25-JUL-2003; 2003US-00627930.
                                                                                                                                 23-APR-2002; 2002WO-US013135.
23-APR-2002; 2002WO-US013143.
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                                                                                                                                                                                            NYCE J W.
SANDRASAGRA A.
                                                                                                                                                                                                                                                                        MILLER S.
SHAHABUDDIN S.
                                                                                                                                                                                                                                                                                                                                                                                             Shahabuddin S, Lu H,
                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-293804/27.
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es 18; Conserv
                                                                                                                                                                                                                                                     AGUILAR D.
                                                                                                                                                                                                                                   FANG L.
                                                                                                                                                                                                                                                                                                                                   CONG H.
                                                         11-MAR-2004
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                                                                                                                                                                                            (NYCE/)
(SAND/)
                                                                                                                                                                                                                                                                                                                                   CONG/)
                                                                                                                                                                                                                                   TANG/)
                                                                                                                                                                                                                                                                                            SHAH/)
                                                                                                                                                                                                                                                                                                                   LUHH/)
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Matches
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Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR4; VCRM; VCRM; Lryptase a; Lxyptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease; Lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; airway inflammation; allergy; inflammation; systic fibrosis; CF; chronic obstructive pulmonary disease; COPD; allergy chronic acute respiratory distress syndrome; pulmonary hypertension;
                                                                                                                                                                                                                                                                                                        lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Miller S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nyce JW, Sandrasagra A, Tang L, Aguilar D,
Shahabuddin S, Lu H, Cong H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-APR-2002; 2002WO-US013135.
23-APR-2002; 2002WO-US013143.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-JUL-2003; 2003US-00627930.
                                                 Human oligonucleotide #2056.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SANDRASAGRA A.
TANG L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MILLER S.
SHAHABUDDIN S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGUILAR D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NYCE J W.
                                                                                                                                                                                                                                                                                                                                                                                                      US2004049022-A1.
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CONG H.
                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
  15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004.
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(SAND/)
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(SHAH/)
(LUHH/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TANG/)
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Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codon, intron of respiratory disease-relevant gene e.g. CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g. WPI; 2004-293804/27.

Claim 2; SEQ ID NO 2156; 174pp; English.

The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL) beceptor, interleukin (IL)-5 receptor, CCR1, CCR3, Botaxin 1, RANTES, MCP4, CD23, ICAM, VCAM, CTYPtase a, ITYPtase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention also relates to a method of screening a candidate compound that binds to one or more nucleic acid target(B) or expressed product(S), for the prevention and/or treatment of a respiratory or lung disease. The prevention and/or treatment of a respiratory or lung disease. The cligonucleotides are useful for reducing or inhibiting expression of a gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor, CCR1, CCR3, Ectaxin-1, RANTES, MCP4, CD23, ICAM, WCAM, tryptase a, tryptase b, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are useful for preventing or treating a respiratory or lung disease. The respiratory or lung disease is associated with hyper-responsiveness to and/or increased levels of, adenosine and/or levels of adenosine A receptor(S), and/or asthma and/or lung allergies associated with cinflammation or an inflammatory disease. The respiratory or lung disease is considered with a sething and and or lung allergies associated with considered respiration, allergy, asthma, impeded respiration, allergy, asthma, impeded respiration, allergy, asthma, impeded respiration, allergy, asthma, impeded respiration, allergy asthma and and and a set and a manuformary disease. allergic rhinitis, acute respiratory distress syndrome, pulmonary hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide of the

Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;

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Gaps

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Query Match 0.9%; Score 16.2; DB 1; Length 23; Best Local Similarity 85.7%; Pred. No. 4.3e+02; Matches 18; Conservative 0; Mismatches 3; Indels

0; Mismatches

850 CIGGACAAGGACCIGAAGCAG 870

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per primers AAAA64535-36 were used to amplify a fragment of the human FEZI gene. FEZI is a tumour suppressor gene, located at chromosome location appressor of FEZI is detected in a variety of cancer cells. Expression of FEZI is detected in a variety of cancer cells. Expression of FEZI inhibits tumour growth and profile Expression of FEZI inhibits tumour growth and modulates the effect of the FEZI protein. Inhibitors of FEZI gene expression are useful for inducing cells to proliferate. Compounds which modulates the effect of the FEZI protein. Inhibitors of FEZI gene expression are useful for inducing cells to proliferate. Compounds which modulate FEZI association with tubulin are useful for alleviating tubulin hyper- or hypo-polymerisation disorders, such as those associated with aberrant initiation of mitosis, modulation of the initiation and rate of cell proliferation and cell growth, modulation of cell shape, cell rigidity, cell motility, rate and stage of cellular DNA replication, intracellular distribution of organelles, metastatic potential of cell and cellular transformation from a non-cancerous to cancerous phenotype. Compounds which modulate FEZI binding and
                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                      Human; FEZ1 gene; tumour suppressor gene; 8p22; cancer; tumour growth; tumour proliferation; tubulin; microtubule; protein FF1-gamma; tubulin polymerisation disorder: mitosis initiation; cell proliferation; cell growth; cell shape; cell rigidity; cell motility; DNA replication; tumorigenesis; tumour survival; metastasis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New polynucleotide homologous with a portion of one strand of the human FEZ1 gene, useful for alleviating abnormal cell proliferation such as
                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                phosphorylation are also useful for alleviating a disorder, such as
                                              .
    Length 22;
                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                 PCR primer G6 used to amplify exon 2 of human FEZ1 gene.
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    Score 16.2; DB 1;
Pred. No. 4.1e+02;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 45; 255pp; English.
                                                                                     535 AGCCCCATCTTTGACAAGCCC 555
                                                                                                                          22 Agccccargradacac 2
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    0.9%;
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                                                                                                                                                                                                                                      AAA64536 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                     02-JAN-2001 (first entry)
                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-558396/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Croce CM, Ishii H;
Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200050565-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-AUG-2000
                                                                                                                                                                                                                                                                                AAA64536;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cancer.
                                                                                                                                                                                                                  AAA64536,
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inflammation; immunological disease; haemopathy;
                                                                                                                                                                                       WPI; 2002-549001/59.
                                                                                                                                                                  Xie Y;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-DEC-2001.
                      primer; ss.
                                                              CN1347994-A
                                                                                  08-MAY-2002
                                                                                                                                                                                                                                            infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABK23339;
                                                                                                                                                                  Mao Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABK23339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes the human Zmax1 gene and the high bone mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HBM genes have osteopathic activities. The genes can be used in gene therapy, antisense therapy and in the production of vaccines. They can be used in the diagnosis and treatment of bone disorders including osteoporosis, Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia.

ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in
                                                                                                                                            Human, high bone mass, HBM gene, Zmaxl gene, chromosome 11, 11q13.3; sequence tagged site; STS; osteoporosis; osteopathic; gene therapy; antisense therapy; vaccine; bone disorder; Paget's disease, adapter; sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                       New high bone mass (HBM) and Zmaxl genes and proteins useful for modulating bone mass for the treatment of e.g. osteoporosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human p70 ribosome S6 kinase 26.29; human; malignant tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%; Score 16.2; DB 1; Length 24; 15.7%; Pred. No. 4.5e+02; ve 0; Mismatches 3; Indels
                                                                                                                           Zmax1 gene region physical map preparation STS marker #501.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human p70 ribosome S6 kinase 26.29 RT-PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seguence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                               Johnson ML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 37; 443pp; English.
                                                                                                                                                                                                                                                                                                                                               Carulli JP, Little RD, Recker RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  862 CTGAAGCAGTACCTGGATGAC 882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                            (GENO-) GENOME THERAPEUTICS CORP.
CTGGAGAAGGCCCTGCAGCAG
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                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                            2000US-00543771.
2000US-00544398.
                                                                                                                                                                                                                                                                         21-JUN-2000; 2000WO-US016951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABS55758 standard; DNA; 24
                                                              24
                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18; Conservative
                                                              DNA;
                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-657171/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                              ABA82542 standard;
                                                                                                                                                                                                                                WO200177327-A1
                                                                                                                                                                                                  Homo sapiens,
                                                                                                                                                                                                                                                                                            35-APR-2000;
                                                                                                                                                                                                                                                                                                      05-APR-2000;
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                                                                                                      25-JAN-2002
                                                                                                                                                                                                                                                     18-OCT-2001
                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABS55758;
                                                                                   ABA82542
            23
                                         Best Loca
Matches
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Human; mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke; lipid-associated condition; arteriosclerosis; cardiovascular disease; ss; osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up; neurovascular condition; wound healing; gene therapy; PCR primer; probe; bone development disorder; antiarteriosclerotic; cardiovascular; osteopathic; cerebroprotective.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention discloses one new kind of polypeptide, human p70 ribosome 56 kinase 26.29, polynucleotides encoding this polypeptide and DNA recombination process to produce the polypeptide. The present invention also discloses the method of applying the polypeptide in treating various diseases, such as malignant tumours, inflammations, imfection (HIV). The present invention also discloses the antagonist resisting the polypeptide and its treatment effect, and the application of the polypucleotides encoding human p70 ribosome 56 kinase 26.29. This sequence represents a reverse transcripates PCR primer used to isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
HIV human immunodeficiency virus; reverse transcriptase PCR; RT-PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptide human P70 ribosome S6 kinase 26.29 and encoding polynucleotides for treating malignant tumors, inflammations, immunological diseases, hemopathy and human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
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Pred. No. 4.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cDNA encoding the human p70 ribosome S6 kinase 26.29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 24 BP; 4 A; 7 C; 11 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 17 (Disclosure); 34pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BODE-) BODE GENE DEV CO LTD SHANGHAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97 GITGCTCGCGCCCCCGCCG 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 derrerededederededed 1
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                                                                                                                                                                                                                                                                                                                                              11-OCT-2000; 2000CN-00125684.
                                                                                                                                                                                                                                                                                                                                                                                                                     11-OCT-2000; 2000CN-00125684.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%;
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Best Local Similarity 85.77
Watches 18; Conservative
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ADB98620;
                                                                  Babij P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 209
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                                                                                                                                                                                                                                               incentral researce to a mechanism describe that binds to or inhibits binding of a molecule to high bone mass (HBM) or its wild type gene, Zmax1. Compounds identified by the method are useful for treating, dangoosing, preventing or screening for normal and abnormal lipid—associated conditions, including arteriosclerosis, cardiovascular disease, stroke, and osteoporosis. The compounds may also be used in the treatment or prevention of diabetic atherosclerosis, neurovascular conditions caused by plaque build-up, poor circulation due to plaque build-up and associated poor wound healing. The methods may be used in gene therapy, pharmaceutical development, and diagnostic assays for bone development disorders. Molecules identified by comparison of Zmax1 and HBM systems can be used as surrogate markers in pharmaceutical cevelopment, in diagnosis of human or animal bone disease, and in the treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA molecules encoding human Zmax1 and HBM, and PCR primers, probes, linkers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation; gene therapy; bone density modulation; bone strength; trabecular number; bone size; bone tissue connectivity; bone disease; osteoporosis; PCR; osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
                                                                                                                                                                                                                                         The invention relates to a method for identifying a molecule involved in
                                                                                                                                            Identifying molecules involved in lipid regulation, useful for diagnosing, treating or preventing e.g., arteriosclerosis, comprises identifying a molecule that binds to high bone mass gene or its corresponding wild type gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                           Johnson ML;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human HBM STS marker forward primer #251.
                                                  (GENO-) GENOME THERAPEUTICS CORP. (UYCR-) UNIV CREIGHTON SCHOOL MEDICINE.
                                                                                                                                                                                                               Disclosure; Page 42; 409pp; English.
                                                                                          Little RD, Recker RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                862 CTGAAGCAGTACCTGGATGAC 882
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       and adapters of the invention
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2001US-0291311P.
2002US-0353058P.
                          26-MAY-2000; 2000US-00578900.
25-MAY-2001; 2001WO-US016946.
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                                                                                                                   WPI; 2002-097784/13.
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17-MAY-2001; 2
01-FEB-2002; 2
                                                                                          Carulli JP,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 208
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The invention relates to novel transgenic animals expressing the high bone mass (HBM) gene, expressing the corresponding wild type HBM gene, comprising an alteration of the gene encoding LRP5 or LRP6, or expressing an LRP5 that is modulated by an altered gene control sequence introduced by homologous or non-homologous recombination. The transgenic animals are for the study of bone density modulation or bone mass modulation. The invention has osteopathic and cytostatic activity. The polynucleotides of the invention may have a use in gene therapy. The transgenic animals and nucleic acids are for the study of bone density modulation, where the conceit are for the study of bone mass is modulated relative to non-transgenic animals of the same species in more than one parameter selected from bone density, The strength, trabecular number, bone size, or bone tissue connectivity. The strength, trabecular number, bone size, or bone tissue connectivity. The cransgenic animals, nucleic acids and methods are useful for identifying molecules involved in bone development, and for developing pharmaceutical compositions, which may be employed for treating or preventing bone diseases, or compositions, which may be employed for treating or preventing bone diseases, or useful in methods for disagnosing diseases involved in bone development, or characterised by reduced bone density or mass. The present sequence is useful in the exemplification of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                New transgenic animals (e.g. mice), useful as models for studying bone
                                                                                                                                                                                                                                                                                                                                                                                                                                             density modulation, developing drugs for treating or preventing bone diseases (e.g. osteoporosis), or diagnosing diseases characterized by reduced bone density.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                Bodine PV;
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                                                                                     (GENO-) GENOME THERAPEUTICS CORP
                                                                                                                                                                                                                                Yaworsky PJ,
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17-MAY-2001; 2001US-0291311P.
01-FEB-2002; 2002US-0353058P.
04-MAR-2002; 2002US-0361293P.
04-MAR-2002; 2002US-0361293P
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                                                                                                                                                                                                                                                                                                                      WPI; 2003-129278/12.
                                                                                                                                                                                                                                Bex FJ,
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                                                                                                                                     (AMHP ) WYETH
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LRP6 mutants, which results in a HBM-like phenotype when expressed in a cell. The HBM-like phenotype results in bone mass modulation and/or lipid level modulation. The invention is useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bene mass and/or lipid levels in a subject suffering from e.g. osteoporosis. The present sequence is a Sequence Tagged Site (STS) marker, which was used to prepare a physical map of the Zmaxl (LRPS) gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to High Bone Mass (HBM), LRPS (Zmax1) and
                                                                                                                                                                                                                                                                                                              New nucleic acid comprising a mutation in LRP5 or LRP6, useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bone mass and/or lipid levels in a subject
                                                                                                                                       Morales A, Yaworsky PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                       Graham JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 2; Page 64; 629pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          suffering from e.g. osteoporosis.
(GENO-) GENOME THERAPEUTICS CORP (AMHP ) WYETH.
                                                                                                                                       Anisowicz A,
                                                                                                                                                                                                                               WPI; 2003-129214/12.
                                                                                                                                       Allen K,
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Match 0.9%; Score 16.2; DB 1; Length 24; Local Similarity 85.7%; Pred. No. 4.5e+02; les 18; Conservative 0; Mismatches 3; Indels 862 CTGAAGCAGTACCTGGATGAC 882 1 CTGAACCACTACCTGTATGAC 21 Query Match Matches ð

0

Gaps

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Human cyclin-dependent kinase 2, SDSO target region #5. ADO23075 standard; cDNA; 19 01-JUL-2004 (first entry) AD023075; RESULT 210 AD023075 A STAN TO STAN THE ST

BP

Human; ss; SDSO; short double stranded oligonucleotide; cleavage site; viral infection; malignant tumour; genetic disease; metabolic disease; gene chip; protein chip; microarray; gene drug; bernogene; Lungene; Hepatogene; Leukogene; Lymbhogene; Prostogene; Braatogene; Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer; RNA interference

Homo sapiens.

US2004072769-A1

15-APR-2004.

16-SEP-2002; 2002US-00016490.

16-SEP-2002; 2002US-00016490

O C NIX (/CNIX)

Yin JO;

WPI; 2004-355427/33.

Designing and selecting short double-stranded oligonucleotides for treating viral infections, cancer and genetic or metabolic diseases, comprises using gene chip and protein chip microarrays to identify sepecific DNA sequences.

Example 1; Page 19; 58pp; English.

Liu W;

software. Also included are pnarmaceutical compositions of such as Dermogene, Indugene, Hepatogene, Leymphogene, Lymphogene, Drugene, Breastogene, Braittungene and Skin-whitogene including but being not limited to part or all of the following components: single or group of specific 19-25 nt dsRNA, 19-25 nt sRNA-CDNA, 19-25 nt dsRNA, and/or single-stranded RNA and/or DNA with the special pattern, 5' cgdAT(U)-3' or its derivatives, one or more nucleic acid condensation agents (or none), one or more pharmaceutical carriers, one or more specific cell-targeting proteins and other active agents and additional materials) and a simplified method for predicting and selecting a specific and efficacious small double-stranded oligomucleotides (SDSO), comprising identifying a special pattern that can be localised in any comprising identifying a special pattern that can be localised in any constition of an oligonucleotide sequence evaluating the specificity of a selected sequence). The Short interfering RNA (SiRNA) are targeted against genes involved in viral interfering malignant tumours, genetic and exact double-stranded oligonucleotides as a gene drug that can expection may be used for treating diseases or disorders associated with abnormal compession of genes in cells or tissues of humans or animals, such as a second corression of genes in cells or tissues of humans or animals. for the treatment of viral infections, malignant tumours, and genetic and metabolic diseases, comprising screening and identifying a specific DNA sequence in an abnormal gene encoding a protein with gene chip and protein chip microarrays. The above method comprises screening the disease-causing genes, over-expressing in cells and/or tissues, with the desase-causing genes, over-expressing in cells and/or tissues, with the equence within the abnormal gene encoding a protein or playing other biological roles with the assistance of computer and specific software, predicting efficactions 19-25 in double-stranded oligonucleotides with a predicting efficactions for a special pattern complementary to at least a portion of an RNA molecule and making sure that selected sequence software, Also included are pharmaceutical compositions of gene drugs The invention relates to screening, identifying or predicting, and assembling 19-25 nt double-stranded oligonucleotides (termed short double expression of genes in cells or tissues of humans or animals, such as viral infections, cancer, or genetic or metabolic diseases. The present sequence is a target region for an SDSO from an human cDNA.

 x_0

Sequence 19 BP; 2 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Gaps ., 0 0.9%; Score 16; DB 1; Length 19; 100.0%; Pred. No. 3.9e+02; ive 0; Mismatches 0; Indels 0.55, 100.0%; Pre-Conservative Local Similarity es 16; Conserv Query Match Best Loca Matches

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922 CTGTTCCAGCTGCTCC 937 crerrecascrecree 17 N

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AAT67065 standard; DNA; 20 AAT67065: AAT67065/

RESULT 211

BP.

Soluble type I insulin-like growth factor receptor 3' PCR primer.

(first entry)

06-AUG-1997

Pype I insulin-like growth factor receptor; IGF-1R; tumour; melanoma; prostate cancer; ovary cancer; breast cancer; lung cancer; smooth muscle cancer; apoptosis; gene therapy; primer; PCR; polymerase chain reaction; ss.

Synthetic.

WO9718241-A1

22-MAY-1997. ö

Gaps

; 0

Length 24; 5; Indels

10017621-3sl.rng

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The invention relates to human neuregulin 55, polynucleotide for coding this polypeptide and a method for producing this polypeptide by using DNA recombination technique. The invention also discloses the method for curing several diseases, such as nervous system developmental diseases, neuropsychopathy, other nervous system diseases, development disturbance, tumours, inflammations and immunological disease by using said polypeptide. The invention also discloses an antagonist for resisting said polypeptide and its therapeutic action and also discloses the application of polynucleotide to coding this novel human neuregalin 55. The present sequence is that of a human neuregulin 55 primer, useful to
                                  presence of N-acetylglucosamine kinase (AG kinase). Efficient production of UDPAG using N-acetylglucosamine as substrate. UDPAG is a key intermediate in the synthesis of Oligosaccharides for use as drugs and functional materials. Sequences AAX31940 to AAX31953 represent primers used during the course of the invention
acetylglucosamine (UDPAG). UDPAG is prepared by microbial fermentation from uridine 5^{\prime}-monophosphate (UMP) and N-acetylglucosamine in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polypeptide human neuregulin 55 and polynucleotides for encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 0.9%; Score 16; DB 1; Length 24; Best Local Similarity 79.2%; Pred. No. 4.9e+02; Matches 19; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; neuregulin 55; nervous system; development; neurc
tumour; inflammation; immunological disease; primer; ss.
                                                                                                                                                                             Sequence 24 BP; 0 A; 4 C; 8 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                      0.9%; Score 16; DB 1; 79.2%; Pred. No. 4.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; Page 18 (Disclosure); 35pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human neuregulin 55 PCR primer SEQ ID NO 3.
                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1321 TACCCCAAGTACCGAGCCGAGGCC 1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BODE-) BODE GENE DEV CO LTD SHANGHAI.
                                                                                                                                                                                                                                                                                                              666 AGGCAAAGCAAGCTCACAGACAA 689
                                                                                                                                                                                                                                                                                                                                                     24 Acgcacaagcaagcaaacagccaa 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-MAY-2000; 2000CN-00115761.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABL41245 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-217507/28.
                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mao Y, Xie Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CN1324826-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABL41245;
                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 213
                                                                                                                                                                                                                                                                                                                                                                                                                                               ABL41245
ID ABL4
  88666666688
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                 A PCR fragment corresponding to human soluble type I insulin- like growth factor receptor [IGF-IR) (see also AAT67063) was created using mutagenic primers. The 5' primer (AAT67064) contains an artificial BamHI site and corresponds to nucleotides 135-153. The 3' reverse primer (AAT67065) PCR fragment was used in the construction of wefor pGRX-5x-3/IFGIRSOL. Soluble IGF-IR (see also AAW15782) was expressed as a GST fusion protein in E. coli BL21 (DE3) transformants. Soluble IGF-IR can be used in methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Uridine diphosphate-N-acetylglucosamine; UDPAG; microbial; fermentation; uridine 5'-monophosphate; UMP; N-acetylglucosamine; AG kinase; drug;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a process for producing Uridine diphosphate-N-
                                                                                                                                                                                                                                             - used for inducing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Microbial production of uridine diphosphate-N-acetylglucosamine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.9%; Score 16; DB 1; Length 20;
100.0%; Pred. No. 4.1e+02;
ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for inducing resistance to tumour growth in a mammal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Okuyama K,
                                                                                                                                                                                                                                         Soluble type I insulin-like growth factor receptor resistance to tumour growth in a mammal.
                                                                                                                                                          Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 2 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                        Dambrosio C, Ferber
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Primer C used in the production of UDPAG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Midorikawa Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 6; Page 17; 38pp; Japanese
                                                                                                                                                                                                                                                                                                              Example 2; Page 28; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5.,
100.0%; Pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1100 GGTACCGGCCCCTGA 1115
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                                                                                                          (UYJE-) UNIV JEFFERSON THOMAS
                       96WO-US018327.
                                                                95US-0006699P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Takenouchi K, Ishige K,
Noguchi T;
                                                                                                                                                        Baserga R, Resnicoff M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-243625/20.
                                                                                                                                                                                                  WPI; 1997-289231/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (YAMA-) YAMASA
                       13-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .1-AUG-1998;
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RESULT 212 AAX31942,

ò g CX X SX X B X X B X X B X B X B X B

development; neuropsychopathy;

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Gaps

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Page 126

g

TACTCCAAGTACCCAGGCAATGCC 24

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ABI83145 standard; DNA; 24 BP.
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ABI83145;

(first entry) 15-FEB-2002

Capture oligonucleotide Zip ID#374 oligo #2.

Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCAl; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

Synthetic.

WO200179548-A2

25-OCT-2001.

04-APR-2001; 2001WO-US010958.

14-APR-2000; 2000US-0197271P.

(CORR) CORNELL RES FOUND INC

Favis R, Kliman R; Gerry NP, Zirvi M, Barany F,

WPI; 2002-034366/04

to which Designing capture oligonucleotide probes for use on a support complementary oligonucleotides hybridize with little mismatch.

Example 5; Fig 25; 300pp; English.

The present invention describes a method (MI) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus funigatuts, viruses e.g. T-cell lymphocytotrophis cirus, Essterin-Barr virus and polio virus, and parasitic infectious agents celected from Onchovera volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

CC betecting cancer involving oncogenes, tumour suppressor genes from oncogenes, rumour suppressor genes of cancer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically mavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comparises scanning (using e.g. a scanning cand feed industry, detecting comparises scanning the support at the particular sites and identifying if ligation of the oligonacleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonacleide sequences used in the exemplification the present invention

Sequence 24 BP; 8 A; 6 C; 8 G; 2 T; 0 U; 0 Other;

Gaps .. 0 Query Match 0.9%; Score 16; DB 1; Length 24; Best Local Similarity 79.2%; Pred. No. 4.9e+02; Matches 19; Conservative 0; Mismatches 5; Indels

1 AACGGGCTCATCACAGAGACGGGA 24

g

RESULT 215 ABI92410/c

ABI92410 standard; DNA; 24

(first entry) 15-FEB-2002 ABI92410;

Capture oligonucleotide Zip ID#374 oligo #3.

Human, K-ras, PCR primer, probe, capture probe, mutation detection, ligase detection reaction, LDR, p53; BRCA1; BRCA2; infectious disease; infection, 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;

oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

Synthetic.

WO200179548-A2.

25-OCT-2001

04-APR-2001; 2001WO-US010958.

14-APR-2000; 2000US-0197271P.

(CORR) CORNELL RES FOUND INC

Kliman Favis R, Gerry NP, Barany F, Zirvi M,

à

WPI; 2002-034366/04.

Designing capture oligonucleotide probes for use on a support complementary oligonucleotides hybridize with little mismatch.

Claim 3; Fig 26; 300pp; English.

The present invention describes a method (M1) for designing capture oilgonucleotide probes (I) for use on a support to which complementary oilgonucleotide probes (II) will hybridise with little mismatch, where oligonucleotide probes (II) will hybridise with little mismatch, where oligonucleotide probes (II) will hybridise with little mismatch, where considerable in the capture in the considerable in the the present invention

Sequence 24 BP; 2 A; 8 C; 6 G; 8 T; 0 U; 0 Other;

Gaps .. 0 0.9%; Score 16; DB 1; Length 24; 79.2%; Pred. No. 4.9e+02; tive 0; Mismatches 5; Indels Matches 19; Conservative Local Similarity Query Match

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994 AACCTGCTCATCAACGAGAGGGGA 1017

ò

AACGGGCTCATCACAGAGACGGGA

oligonucleotide probes (II) will hybridise with little mismatch, where cligonucleotide probes (II) will hybridise with little mismatch, where (II) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents for detecting infectious diseases acused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus funigatutus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

Complete from Onchoverva volvulus, Entemore suppressor genes involved in DNA amplification, repulation, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically associated with a gene selected from BRCA1 gene, cancer is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning and electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification Human, K-ras, PCR primer, probe, capture probe, mutation detection, ligase detection reaction; LDR, p53; BRCA1, BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss. The present invention describes a method (M1) for designing capture Designing capture oligonucleotide probes for use on a support complementary oligonucleotides hybridize with little mismatch. Sequence 24 BP; 2 A; 8 C; 6 G; 8 T; 0 U; 0 Other; Capture oligonucleotide Zip ID#374 oligo #1. Favis Example 5; Fig 25; 300pp; English. Gerry NP, ABI83144 standard; DNA; 24 BP (CORR) CORNELL RES FOUND INC 04-APR-2001; 2001WO-US010958. 14-APR-2000; 2000US-0197271P. (first entry) of the present invention MPI; 2002-034366/04. Zirvi M, WO200179548-A2 15-FEB-2002 25-OCT-2001 Synthetic. Barany F, ABI83144; RESULT 216 ABI83144,

a support to which

Kliman R;

α,

Gaps .. 0 Query Match 0.9%; Score 16; DB 1; Length 24; Best Local Similarity 79.2%; Pred. No. 4.9e+02; Matches 19; Conservative 0; Mismatches 5; Indels

oligonucleotide probes (II) will hybridise with little mismatch, where oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida ablicans and Aspergillus funigatutus, viruses e.g. T-call lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents e.g. Estected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

CC selected from Onchoverva volvulus, replication, recombination or repair, the as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

CC petecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, buman papillomavirus types 16 and 19 and liver cancers. The method is also used for environmental monitoring for environmental monitoring for environmental monitoring cand feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the computer of particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using esquences. ABERB2074 to a presence or absence of the target undelected sequences used in the exemplification Human, K-ras, PCR primer; probe, capture probe, mutation detection, ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection, 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch. The present invention describes a method (M1) for designing capture oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss. Kliman R; Capture oligonucleotide Zip ID#374 oligo #4. Favis R, 24 AACGGGCTCATCACAGAGACGGGA Claim 3; Fig 26; 300pp; English. Gerry NP, BP. (CORR) CORNELL RES FOUND INC 04-APR-2001; 2001WO-US010958. 14-APR-2000; 2000US-0197271P. ABI92411 standard; DNA; 24 (first entry) Barany F, Zirvi M, WPI; 2002-034366/04. WO200179548-A2. 15-FEB-2002 25-OCT-2001 Synthetic. ABI92411; RESULT 217 ABI 9241 g

Similarity 79.2%; Score 16; DB 1; Length 24; Similarity 79.2%; Pred. No. 4.9e+02; O. Mismatches 5; Indels 994 AACCTGCTCATCAACGAGGGGA 1017 Query Match 0.9 Best Local Similarity 79.2 Matches 19; Conservative

Sequence 24 BP; 8 A; 6 C; 8 G; 2 T; 0 U; 0 Other;

of the present invention

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Gaps

; 0

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994 AACCTGCTCATCAACGAGAGGGA 1017

99WO-US028772.

06-DEC-1999;

08-JUN-2000

1 AACGGGCTCATCACAGAGACGGGA 24

g

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Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDKI, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA82412 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
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                                                               BP.
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                                                               AAA83175 standard; DNA; 19
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Best Local Similarity 89.5
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1028
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AAAB31171

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                                                                                                                                                                 New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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0.9%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 4.3e+02;
Matches 17; Conservative 0; Mismatches 2; Indels
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                                                                                                            Robbins JM;
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                                                                                                                                                                                                                           Disclosure; Page 57; 109pp; English.
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                                                                                                            Barber JR,
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                                                                                                            Welch PJ,
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                                                                                                            Tritz R,
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designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86797. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CNE1, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin B1.
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                                                                                                                                                                        Score 15.8; DB 1; Length 1
Pred. No. 4.3e+02;
0; Mismatches 2; Indels
                                                                                                                                      Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
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89.5%; Pred. No. *...
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                                                                                                                                                                                                                                            993 GAACCTGCTCATCAACGAG 1011
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                                                                                                                                                                                                                                                                                                                                                                 AAA83174 standard; DNA; 19 BP
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                                                                                                                                                                                                          17; Conservative
                                                                                                       restenosis treatment
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                                                                                                                                                                                          Local Similarity
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [1] which cleaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (mWP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid modecule [11] comprising a promoter operably linked to a nucleic acid modecule [11] comprising a promoter operably linked to a nucleic acid modecule [11] comprising a promoter operably linked to a nucleic acid segment encoding [1]. [1] can have antiposoriatic, activities, antiseborrheic, antidiabetic, antisickling, cleaves RNA encoding cytckine involved in inflammation. [1] can be used in gene therapy. [1] and [11] are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carichoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retaining and preventing proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retaining and preventing proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, and retaining proliferative eye diseases such as diabetic prematurity and retaining the retaining and preventing proliferative eventing eventing proliferative eventing eventing proliferative eventing eventin
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                                                                                                                                                                                                                                                     Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoritasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; sc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   scarring such as keloid, adhesion and hypertrophic scar. AAH57577 to AAH62099 represent sequences used
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                                                                                                                                                                                                   Cyclin D2 ribozyme binding site SEQ ID NO:1893
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                                AAH59469 standard; DNA; 19 BP.
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Matches 17; Conservative
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Matches

Local Similarity

crescadarriresceres 19

RESULT 223

AAH58336 standard; DNA; 19 BP. AAH5833

AAH58336;

(first entry) 10-SEP-2001

Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:760.

recognition site; target, ribozyme binding site; eye disease; vulnerary; proliferative disease; &kin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; sickle cell retinopathy; ss.

Homo sapiens

Synthetic.

WO200130362-A2

03-MAY-2001

26-OCT-2000; 2000WO-US029500.

99US-0161532P. 26-OCT-1999;

(IMMU-) IMMUSOL INC.

Robbins JM, Tritz R;

WPI; 2001-300427/31.

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

Example 1; Page 127; 408pp; English.

The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproseinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, ophthalmological, cytostatic, antiseborrheic, antidiabetic, antisickling, dermatchlogical, vulnerary, keratchlytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (11) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, slob be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell reating and preventing creating such as kelochment, and for treating and preventing proliferative eye diseases such as diabetic prematurity and retinal detachment, and for treating and preventing burn also exarring such as kelodid, adhesion and hypertrophic or hypertrophic burn scar, AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention

Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

ó Gaps ó 0.9%; Score 15.8; DB 1; Length 19; 39.5%; Pred. No. 4.3e+02; ive 0; Mismatches 2; Indels 89.5%; 17; Conservative Local Similarity Query Match Matches Best

1 CTGGCAGATTTTGGCCTGG 19

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RESULT 224 AAH58337

BP. AAH58337 standard; DNA; 19

AAH58337;

(first entry) 10-SEP-2001

Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:761.

Human, ribozyme therapy, hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisting; ophthalmological; actaolytic; gene therapy; viral wart; atopic dermattis; actinic keralosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.

Homo sapiens.

Synthetic.

WO200130362-A2

03-MAY-2001

26-OCT-2000; 2000WO-US029500

99US-0161532P 26-OCT-1999;

(IMMU-) IMMUSOL INC.

Robbins JM,

WPI; 2001-300427/31.

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

Example 1; Page 127; 408pp; English.

The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [1] which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding [1]. (1) can have antipsoriatic, administering a promoter operably linked to a nucleic acid segment encoding [1]. (1) can have antipsoriatic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carlicative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retining proliferative eye diseases such as diabetic retinopathy and retining described and preventing proliferative eventions. scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention

Sequence 19 BP, 2 A, 4 C, 7 G, 6 T, 0 U, 0 Other;

Gaps ; 0 0.9%; Score 15.8; DB 1; Length 19; 89.5%; Pred. No. 4.3e+02; tive 0; Mismatches 2; Indels Query Match 0.9
Best Local Similarity 89.5
Matches 17; Conservative

;

Indels

Pred. No.

89.5%;

Best Local Similarity

Matches

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Example 1; Page 127; 408pp; English.
TGGCTGACTTTGGCCTGGC 1046
     TGGCAGATTTTGGCCTGGC 19
                            AAH58338 standard; DNA; 19 BP.
                                                                                                                                      26-OCT-2000; 2000WO-US029500.
                                                                                                                                              99US-0161532P
                                            (first entry)
                                                                                                                                                              Tritz R;
                                                                                                                                                      (IMMU-) IMMUSOL INC.
                                                                                                                                                                       WPI; 2001-300427/31
                                                                                                                     WO200130362-A2.
                                                                                                         sapiens.
                                                                                                                                              26-OCT-1999;
                                                                                                                                                              Robbins JM,
                                            10-SEP-2001
                                                                                                                              03-MAY-2001.
                                                                                                                                                                                                            skin or eye
                                                                                                             Synthetic.
1028
                    RESULT 225
                        AAH58338
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Homo sapiens.
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05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-JUN-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                            12-FEB-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                ADF36757;
1029
                                                                                                                                                                                            RESULT 226
                                                                                                                                                                                                                                    ADF36757
ð
                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target, ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatclogical; antiseborrheic; antidiabetic; virucide; antisckling; ophthalmological; keratolytic; gene therapy; virucide; actopic dermatclis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ribozyme (1) Which cleaves RNA encoding a cytokine involved in dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, or definity cophabalmological, cyfostaric, antisebornheir, antidabetic, antiseiskling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin squamous or basal cell cardinoma and viral or sebornheic wart. They can also be used for treating proliferative eye diseases such as diabetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     kle cell retinopathy, retinopathy of
and for treating and preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present invention describes a method for treating a proliferative n or eye disease and scarring. The method involves administering a
                                                                                                                                                                                                                                                                                                                                                                                                                    Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:762.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 retinopathy, vitreoretinopathy, sickle ceil prematurity and retinal detachment, and for
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0.9%; Score 15.8; DB 1; Length 19;

Query Match

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                                                                                                                                                                                                                                                                                                                                        short interfering nucleic acid; siNA; downregulation; wascular endothelial growth factor receptor; VEGFR; antiangiogenic; cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; nephrotropic; gynaecological; angiogenesis-associated condition; cancer; diabetic retinopathy; macular degeneration; neovascular glaucoma; arthritis; psoriasis; endometriosis; angiofibroma; polycystic kidney disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The siNAs have antiangiogenic, cytostatic, antidiabetic, ophthalmological, antiarthritic, antipsoriatic, nephrotropic and appraecological activities. The siNA are useful for modulating (downregulating) the expression of VEGFR genes. The siNA are potentially useful for treating a wide range of angiogenesis-associated conditions, particularly cancers, diabetic retinopathy, macular degeneration,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic acid (siNA) that downregulates expression of the vascular endothelial growth factor receptor (VEGFR) gene. Also described: (1) a siNA that downregulates the VEGF gene, (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors that express siNA; and (5) single-stranded siNA with similar properties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates the vascular endothelial growth factor receptor gene.
                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a double-stranded short interfering
                                                                                                                                                                                                                                                                                          Human VEGFR2 short interfering nucleic acid (siNA) SEQ ID NO:1046.
4.3e+02;
                                                                                                                                                                                                                                                                                                                          double-stranded short interfering nucleic acid;
                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 3; SEQ ID NO 1046; 207pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mcswiggen J, Beigelman L, Pavco P;
                                                                GGCTGACTTTGGCCTGGCC 1047
                                                                                                  1 GGCAGATTTTGGCCTGGCC 19
                                .;
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2002US-0386782P.
2002US-0393748P.
2002US-0406784P.
2002US-0408778P.
2002US-0408378P.
2002US-0408378P.
2002US-0408378P.
                                                                                                                                                                                      ADF36757 standard; RNA; 19 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002US-0363124P
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                                                                                                                                                                                                                                                          (first entry)
                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-679876/64.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         double-stranded short interfering nucleic acid; short interfering nucleic acid; siNA; downregulation; swarchar endothelial growth factor receptor; VEGFR; antiangiogenic; cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; nephrotropic; gynaecological; angiogenesis-associated condition; cancer; ababetic retinopathy; macular degeneration; neovascular glaucoma; arthritis; psoriasis; endometriosis; angiofibroma;
 endometriosis, angiofibroma, also be useful for diagnosis,
                                               oŧ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       double-stranded interfering nucleic acid, useful e.g. for treatment diagnosis of cancer, downregulates the vascular endothelial growth
                                              (e.g. c
in the
                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a double-stranded short interfering nucleic acid (siNA) that downregulates expression of the vascular
                                                                                                                                                                                                                                                                                                                                                                                                                  Human VEGFR2 short interfering nucleic acid (siNA) SEQ ID NO:1370
neovascular glaucoma, arthritis, psoriasis, endometriosis, angic and polycystic kidney disease. The siNA may also be useful for darus screening, target identification and validation, genetic engineering, studying gene function, and also for gene mapping single-nucleotide polymorphisms). The present sequence is used exemplification of the present invention.
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0
                                                                                                                                            0.9%; Score 15.8; DB 1; Length 19; 58.4%; Pred. No. 4.3e+02;
                                                                                                                                                                           Indels
                                                                                                            Sequence 19 BP; 1 A; 5 C; 8 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                           4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; SEQ ID NO 1370; 207pp; English.
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                                                                                                                                                                                                          1033 GACTTTGGCCTGGCCCGAG 1051
                                                                                                                                                                                                                                        cacumeccureccede 19
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29-MAY-2002; 2002WG-0361324P.
06-JUN-2002; 2002WG-0386782P.
03-JUL-2002; 2002US-0393796P.
29-JUL-2002; 2002US-039348P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0408378P.
04-NOV-2002; 2002US-0408378P.
                                                                                                                                                                                                                                                                                                                      BP.
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2002US-00306747.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2002US-0358580P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-JAN-2003; 2003US-0440129P
                                                                                                                                                           68.48;
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                                                                                                                                                                                                                                                                                                                    ADF37081 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                             13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-679876/64.
                                                                                                                                                            Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                   ADF37081;
                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                      RESULT 227
                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                       ADF37081,
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endothelial growth factor receptor (VEGFR) gene. Also described: (1) a sink that downregulates the VEGF gene; (2) kits for in vitro or in vivo delivery of suNA; (1) conjugates and/or complexes of siNA; (4) vectors that express siNA; and (5) single-stranded siNA with similar properties. The siNAs have antiangiogenic, cytostatic, antidiabetic, ophthalmological, antiathrhitic, antipsoriatic, nephrotropic and gynaecological activities. The siNA are useful for modulating (downregulating) the expression of VEGFR genes. The siNA are potentially useful for treating a wide range of angiogenesis-associated conditions, particularly cancers, diabetic retinopathy, macular degeneration, neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma, and polycystic kidney disease. The siNA may also be useful for diagnosis, dung screening, target identification and validation, genetic congineering, studying gene function, and also for gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence is used in the exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a radiation hybrid map of the dog (Canine familiaris) genome comprising the genome location of a marker selected from AAA66139 to AAA66942. The radiation hybrid map is useful for identifying and localising dog genes, since it covers approximately 80 to the dog genome and provides a dense map integrating different types of the dog genome and provides a dense map integrating different types (i.e. Type I and Type II) of markers. The map and the dog genome markers (or complementary sequences) are especially useful to identify genes responsible for phenotypic and behavioural traits in dogs, to identify morbid genes, to analyse diseases and identify implicated genes in such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            genome, useful
behavioral traits
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          genome; genomic marker; radiation hybrid map; identification; nosome location; gene marker; polymorphic microsatellite marker;
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0
                                                                                                                                                                                                                                                                                                                                                                                                                  Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dog genomic marker oligonucleotide sequence SEQ ID NO:474.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 5 A; 8 C; 5 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                           Score 15.8; DB 1;
Pred. No. 4.3e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           phenotype; behaviour; pedigree; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1033 GACTTTGGCCTGGCCCGAG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 73; 87pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.9%;
Best Local Similarity 89.5%;
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Canis familiaris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200029615-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAY-2000
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RESULT 230

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes a radiation hybrid map of the dog (Canine familiaris) genome comprising the genome location of a marker selected from AAA66139 to AAA66942. The radiation hybrid map is useful for identifying and localising dog genes, since it covers approximately 80 % of the dog genome and provides a dense map integrating different types (i.e. Type I and Type II) of markers. The map and the dog genome markers (or complementary sequences) are especially useful to identify genes responsible for phenotypic and behavioural traits in dogs, to identify morbid genes, to analyse diseases and identify implicated genes in such diseases and their alleles, and to study dog pedigrees. They may also be useful for isolating corresponding human gene sequences e.g. genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New radiation hybrid map of the dog, Canine familiaris, genome, useful for e.g. identifying genes implicated in phenotypic and behavioral traits or in genetic diseases and for studying dog pedigrees.
diseases and their alleles, and to study dog pedigrees. They may also be useful for isolating corresponding human gene sequences e.g. genes involved in genetic diseases
                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dog; genome; genomic marker; radiation hybrid map; identification; chromosome location; gene marker; polymorphic microsatellite marker; phenotype; behaviour; pedigree; ss.
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                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                    Dog genomic marker oligonucleotide sequence SEQ ID NO:386.
                                                                                                                                              2; Indels
                                                                       Seguence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                       0.9%; Score 15.8; DB 1;
89.5%; Pred. No. 4.5e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                1437 GGATGCCATGAAACATCCA 1455
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 69; 87pp; English.
                                                                                                                                                                                                            GGATTCCATGAGACATCCA 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  involved in genetic diseases
                                                                                                                                                                                                                                                                                                         AAA66524 standard; DNA; 20
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                                                                                        Ouery Match
Best Local Similarity 89.5.
The 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel antisense compounds capable of modulating expression of daxx useful for diagnosis, prophylaxis and treatment of diseases associated with expression of daxx.
                                                                                                                    Human daxx inhibitory antisense phosphorothioate oligonucleotide SEQ:35.
                                                                                                                                                  Antisense oligonucleotide; daxx; inhibition; phosphorothioate;
Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;
antiinflammatory; daath associated protein 6; Ets-1 associated protein;
infection; inflammation; tumour formation; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDC2 gene antisense PCR primer SEQ ID NO:68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              229 AGTGGTGGTGGTGGCGCA 247
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                 BP
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                 AAF72934 standard; DNA; 20
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                                                                                   (first entry)
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Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cowsert LM;
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                                                                                                                                                                                                                                         sapiens
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                                                                                   24-APR-2001
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                                                                                                                                                                                                                                                                                                          30-JAN-2001
                                                 AAF72934;
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AAF72934
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The present invention describes a method for identifying a compound that induces senescence in a mammalian cell comprising culturing the cell in the presence and absence of the compound, assaying expression of at least one cellular gene (Gla) from 56 or a gene (G2) from 64 genes, with corresponding accession numbers given in the specification, and corresponding accession numbers given in the specification, and compounds that induce senescence when expression of (Gla) or expression of (G2) is lower, in the presence of the compound. Also described: (1) a compound that induces senescence in a mammalian cell; c2 assessing efficacy of a treatment of a disease or condition relating to abnormal cell proliferation or disease or condition relating to abnormal cell proliferation or neoplastic cell growth; or (4) identifying a compound that inhibits senescence-associated induction of cellular gene expression. The compound is useful for treating or for assessing efficacy of treatment of a disease or condition relating to abnormal cell proliferation or neoplastic cell growth. The compound of the invention has a growth-inhibitory effect without producing systemic side effects found with cother growth-inhibitory compounds. ABQ74611 to ABQ74134 represent PCR
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Human, PCR primer, identification, tumour senescence, cytotoxic, ss, abnormal cell proliferation, neoplastic cell growth, growth-inhibitory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                      Identifying a compound that induces senescence in a mammalian p53 deficient or tumor cell comprises assaying expression of cellular ge in the presence of the compound with expression of the genes in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            primers which are used in an example from the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 4; Page 50; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1024 AAGCTGGCTGACTTTGGCC 1042
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                                                                                                                                                                                                  21-DEC-2001; 2001WO-US050574.
                                                                                                                                                                                                                                        2000US-0257907P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  absence of the compound.
                                                                                                                                                                                                                                                                                                                                           Chang B;
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                                                              sapiens
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                                                                                                                                                             38-AUG-2002.
                                                                                  Synthetic.
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has antiinflammatory, autiallorgic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstruction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed annotification but use obtained in the printed annotification but use obtained in the printed annotification.
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                                                                                                                                                                                                                                                                                                                                                                                                              Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, antisense; lung dysfunction, nasal airway dysfunction; antiallergic; antiallergic; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity;
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         but was obtained in electronic format directly from WIPO
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                                                                                                                                                                                                                                                                                                             Pabalan J,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; SEQ ID NO 6170; 872pp; English.
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                                                                                                                                                                                                                                                                                                             Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PDE4A oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                             Li Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
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                                                                                                                                                                                       23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                           24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                                                                                      (EPIG-) EPIGENESIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 GAGCTCACCCTGGCTGACT
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                                                              sapiens.
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Miller S,
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                                                              Ношо
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Page 135

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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polymeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, attisting in the invention has antiinflammatory, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of antiinflammatory steroid in a subject, for reducing or depteting levels of of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from MIPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pharmaceutical composition for treating allments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
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adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
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89.5%; Pred. No. 4.5e+02;
ve 0; Mismatches 2; Indels
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                                   lung inflammation; respiratory disease; ds
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, Tang L, Shahabuddin S;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (EPIG-) EPIGENESIS PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                          Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  has antiminatory sterious and unsquinous. A composition or the invention has antiminatory sterious and unsquinous. A composition may be an immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiminamentory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodiation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention
receptor; bronchodilation; bronchoconstriction; lung allergy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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  adenosine receptor; bronchodilation; bronch
lung inflammation; respiratory disease; ds.
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Shahabuddin S;
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                                                                                                                                                                                                                                                                                                                    Sandrasagra
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Matches 17; Conservative
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                                                                  Homo sapiens.
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WPI; 2003-093058/08. Nyce JW, I

Gaps ö 0.9%; Score 15.8; DB 1; Length 20; 39.5%; Pred. No. 4.5e+02; ve 0; Mismatches 2; Indels 89.5%; Query Match Best Local Similarity 89.5' Marches 17; Conservative

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beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer. Aguilar Pabalan J, Katz E, S; Sandrasagra A, 24-APR-2001; 2001US-0286036P. 23-APR-2002; 2002WO-US013143. EPIG-) EPIGENESIS PHARM INC Li Y, Sa Tang L, WO200285309-A2 Homo sapiens 31-OCT-2002

S oligonucleotide containing less percentage of adenosine, targeted on nucleic acids associated with lung airway or lung dysfunction, and Pharmaceutical composition for treating asthma, has antisense bronchodilating agent.

Claim 15; SEQ ID NO 14153; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, of the invention has antiallergic, antiinflammatory, antiasthmatic, beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition corresponding mRNA or to reduce the amount of target polypeptide present in the lungs. The composition and of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The composition and or pulmonary obstruction, and/or bronchocomericion and/or lungs. inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies as them, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the holigonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

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RESULT 236 ABD27158/c

BP. ABD27158 standard; DNA; 20

ABD27158;

(first entry) 29-JUL-2004

AA486518-derived oligonucleotide SEQ ID 6170.

analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer. Human, antisense, bronchoconstriction, allergy, hyposecretion, pain, respiratory tract inflammation, adenosine sensitivity, lung, cancer, surfactant depletion, antiallergic, antiinflammatory; antiasthmatic,

sapiens. Homo

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WO200285309-A2.

31-OCT-2002

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P.

(EPIG-) EPIGENESIS PHARM INC

Aguilar D; Katz E, Pabalan J, Tang L, Shahabuddin S; Li Y, Sandrasagra A, Nyce JW, I Miller S,

WPI; 2003-093058/08.

S Pharmaceutical composition for treating asthma, has antisense oligonuclectide containing less percentage of adenosine, targeted tnucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.

Claim 15; SEQ ID NO 6170; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonuclectides, effective for alleviating comprising oligonuclectides, effective for alleviating concentration, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The colligonucle orides are derived from a gene encoding or regulating expression of a target polygeptide associated with lung airway or lung expression of a target polygeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers; (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiathmatic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or composition comprises oligo and is administered to reduce the amount of tearget polypeptide present in the lungs. The composition are associated inflammation, allergies and/or surfactant hypoproduction are associated inflammation, allergies and/or surfactant hypoproduction are associated inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it with a disease or condition such as pulmonary vasoconstriction,

Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

Query Match

0.9%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 4.5e+02; ive 0; Mismatches 2; Indels 1018 GAGCTCAAGCTGGCTGACT 1036 20 GAGCTCACCCTGGCTGACT 2 Local Similarity 89.5 les 17; Conservative Best Loc Matches

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Gaps

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ABD23010 standard; DNA; 20 BP RESULT 237 ABD23010

ABD23010;

Human myosin X-derived oligonucleotide SEQ ID 2022.

(first entry)

29-JUL-2004

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory distants, vasoconstriction; respiratory distress syndrome; allergic finititis; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

Homo sapiens.

31-OCT-2002.

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P.

(EPIG-) EPIGENESIS PHARM INC

Pabalan J, Aguilar Katz B, Li Y, Sandrasagra A, Ka Tang L, Shahabuddin S; Nyce JW, I Miller S,

'n

WPI; 2003-093058/08.

Pharmaceutical composition for treating asthma, has antisense oligonucleocide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.

Claim 15; SEQ ID NO 2022; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoonstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery of the invention also describes a kit, that comprises: (a) a delivery of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or mailgnant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated

The invention relates to a compound targeted to a nucleic acid molecule encoding requiem which specifically hybridises with the nucleic acid molecule encoding requiem and inhibits the expression of requiem. The molecule encoding requiem antisense oligonucleotide is useful in modulating the function of nucleic acid molecules encoding requiem. The modulating the function of nucleic acid molecules encoding requiem. The antisense compound can also be used as research tools and diagnostics. It can also be used as tools in differential and/or combinatorial analyses to elucidate expression patterns of a portion or the entire complement of genes expressed within calls and issues. The compound can also be used for treating diseases or conditions associated with requiem, preferably hyperpoliferative disorder, e.g. cancer or a developmental disorder. The compound can also be used as prophylaxis, e.g. to prevent or delay inflammation or tumour formation. The present sequence represents the human requiem antisense oligonucleotide. ö with a disease or condition such as pulmonary vasoconstriction, thillammathion, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergie; bulminis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it. human; requiem; hyperproliferative disorder; cancer;
developmental disorder; infection; inflammation; tumour formation; ss; Gaps New antisense compound targeted to a nucleic acid molecule encoding requiem, useful for modulating expression of requiem or for treating .. 0 DB 1; Length 20; Indels Human requiem antisense oligonucleotide ISIS #152733 Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other; Pred. No. 4.5e+02; 0; Mismatches 2 0.9%; Score 15.8; 89.5%; Pred. No. 4. Example 15; SEQ ID NO 17; 66pp; English. Dobie KW; cancer or developmental disorders. 929 AGCIGCICCGIGGCCIGGC 947 19 AGCTGATCCGAGGCCTGGC 1 BP. 05-AUG-2002; 2002US-00212993. 05-AUG-2002; 2002US-00212993 ADJ46542 standard; DNA; 20 06-MAY-2004 (first entry) Query Match 0.9 Best Local Similarity 89.5 Matches 17; Conservative Bennett CF, Freier SM, (ISIS-) ISIS PHARM INC WPI; 2004-142666/14. US2004023385-A1 sapiens 05-FEB-2004. antisense. Synthetic ADJ46542; RESULT 238 HOMO ADJ46542 8888888888888 δ

Tue Nov

10017621-381.rng

(first entry)

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oulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                         Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codons and introns of respiratory disease-relevant gener CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
                                                                                                          airway inflammation, allergy, asthma, impeded respiration, cystic fibrosis, acute respiratory distress syndrome;
                                                                                             interleukin; IL-4 receptor; IL-5 receptor; lung disease;
                                                                 Oligonucleotide associated to PDE4A #77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 2; SEQ ID NO 1650; 85pp; English.
                                                                                                                                                                                                                                                                  25-JUL-2003; 2003WO-US023509.
                                                                                                                                                                                                                                                                                              29-JUL-2002; 2002US-0399076P
                                                                                                                                                                                                                                                                                                                          (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disease e.g., asthma.
                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-203534/19.
                                                                                                                                                                                                             WO2004011613-A2
                                                                                                                                                                                                                                                                                                                                                      Nyce JW, Tang
Shahabuddin S,
                                                                                                                                                                                  Homo sapiens.
                                      06-MAY-2004
                                                                                                                                                                                                                                        05-FEB-2004
           ADJ60794;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to a method for identifying a compound that induces senescence in a mammalian cell. The method comprises assaying the expression of cellular genes in the cell in the presence and absence of expression of cellular genes in the cell in the presence and absence of expression of tumour senescence genes. These may be used in treating diseases or conditions related to abnormal cell proliferation or neoplastic cell growth, in assessing the efficacy of the treatment of the disease or condition, or in identifying compounds that induce senescence in mammalian cells or that inhibit senescence-associated induction of cellular gene expression. PCR primers ADH80277-ADH80400 were used to amplify genes that are up- or downregulated in doxorubicin-induced accelerated senescence to identify senescence-inducing compounds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Identifying compounds that induce senescence in mammalian cells, useful for treating e.g. cancer, comprises assaying the expression of cellular genes in the cell in the presence and absence of the compound.
                                                                     Gaps
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                                                                                                                                                                                                                                                                                                              Cytostatic; human; senescence; tumour; PCR; primer; ss; CDC2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 4.5e+02;
live 0; Mismatches 2; Indels
                                         Length 20;
                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
             Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;
                                      Score 15.8; DB 1;
Pred. No. 4.5e+02;
                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 4; SEQ ID NO 68; 102pp; English
                                                                                                GTGGTGGCGCCAGTGA 251
                                                                                                                          20 Greardardecederaa 2
                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JUL-2002; 2002US-0394121P.
                                                                                                                                                                                                                                                                                                                                                                                                                            27-JUN-2003; 2003WO-US020425.
                                       0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UNII ) UNIV ILLINOIS FOUND.
                                                                                                                                                                                                ADH80344 standard; DNA; 20
                                                                                                                                                                                                                                                                                  CDC2 PCR primer, SEQ ID 68
                                                                                                                                                                                                                                                      (first entry)
                                                                   17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chang B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-091347/09.
                                                     Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Roninson IB,
                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                      06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                15-JAN-2004
                                                                                                                                                                                                                            ADH80344;
                                                                                                233
                                       Query Match
                                                                                                                                                                    RESULT 239
                                                                   Matches
                                                                                                                                                                                    ADH80344/c
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genes e.g.,

Miller S;

Aguilar D,

L, Sandrasagra A, Lu H, Cong H;

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                                                                                                                                                                                                                                                                                                           chosen from airway inflammation, allergy(ies), asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases (CPD), allergic thintis (AR), acute respiratory distress syndrome (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway obstruction. The present sequence represents an oligonucleotide of the
                                                                                         interleukin (IL)-4 receptor, IL-5 receptor or salts of the objognationally surfactant operatively linked to the oligonacleotide and optionally surfactant operatively linked to the oligonacleotide. The method is useful for preventing or treating a respiratory or lung disease, which involves administering to the airways of a subject an effective amount of an inhibitor. The oligonacleotide is useful for production of a medicament for the prevention and/or treatment of a respiratory or lung disease. The respiratory or lung disease is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
The present invention relates to an oligonucleotide anti-sense to eninitiation codon, coding region with 2-10 nucleotides of 5'-end and end of nucleic acid target comprising gene(s) chosen from e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.9%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 4.5e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          535 AGCCCCATCTTGACAAGC 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCCCCATGTGTGACAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL16976 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nvention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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Matches
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ADL16976
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Gaps

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1024 AAGCTGGCTGACTTTGGCC 1042

Local Similarity 89.5 les 17; Conservative

Best Loc Matches

Query Match

AAACTGGCTGATTTTTGGCC 1

13

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ADJ60794 standard; DNA; 20 BP.

RESULT 240 ADJ60794/c ID ADJ6075

10017621-381.rng

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                                                                                                                                                                                                                                                                                                                                                                      WO2004028458-A2
                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                              modified base
                                                                                                                                                                                                                                                                                                  modified_base
                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                08-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gierse JK;
                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ischemia.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention is directed to antisense oligonucleotides which are targeted to a nucleic acid encoding Ran GTPase activating protein 1 and which modulate the expression of Ran GTPase activating protein 1. The invention is useful for preparing a composition for treating hyperproliferative disorder such as cancer. The invention is also useful in gene therapy. The present sequence is human Ran GTPase activating protein 1 antisense oligonucleotide.
                                                                                                                                                           /note= "Phosphorothioate backbone where all cytidines are 5-methyl cytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New compound having a sequence targeted to a nucleic acid encoding Ran GTPase, useful for preparing a composition for treating hyperproliferative disorder, e.g., cancer.
                        Ran GTPase activating protein 1; hyperproliferative disorder; cancer; gene therapy; antisense; phosphorothioate backbone; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
Ruman Ran GTPase activating protein 1 antisense oligo ISIS #177788
                                                                                                                                                                                                                                                        /*tag= c
/mod_base= OTHER
/note= "2' -methoxyethyl (2' -MOE) nucleotides"
                                                                                                                                                                                                                                nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chimeric; antisense oligonucleotide; phosphorothioate; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 4.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Indels
                                                                                                                                                                                                                                -MOE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                /mod_base= OTHER
/note= "2' -methoxyethyl (2'
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 35; 45pp; English.
                                                                                                        Location/Qualifiers
                                                                                                                                                  base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  733 GCACCCTGCACCGCCATCC 751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCATCCTGCACTGCCATCC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                   31-JUL-2002; 2002US-00211859.
                                                                                                                                                                                                                                                                                                                                                                                              31-JUL-2002; 2002US-00211859.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADM14338 standard; DNA; 20
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les 17; Conservative
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*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Monia BP, Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-142629/14.
                                                                                                                                                                                                                                                                                                            US2004022765-A1
                                                                                                       Key
modified_base
                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                           modified base
                                                               Homo sapiens
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective, antiinflammatory; neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological; immunomodulatory; cardiovascular; gene therapy; inflammation; halbelies; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; se.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antification associated with mPGES-1 e.g., inflammation, Alzheimer compound condition associated with mPGES-1 e.g., inflammation, and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mpGES-1). The human mpGES-1 gene is located on chromosome 9, more specifically to 9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mpGES-1, which specifically hybridise with the nucleic acid encoding inhibits its expression, (2) a method of inhibiting the expression of mpGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mpGES-1. MpGES-1 chimeric antidiabetic, immunomodulator, cardiant, neuroprotective,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER
/note= "phosphorothioate linkages and all cytidine
residues are 5-methylcytidines"
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/note= "2'-0-methocyethyls"
16. .20
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/note= "2'-0-methoxyethyls"
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AD046283;
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(SAND/)
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                                                                                                                                                                                                                                                                                                           chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase; inhibitor; cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; antiinflammatory; neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological; immunomodulatory; cardiovascular; gene therapy; inflammation; Alzheimer; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9g34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. MPGES-1 chimeric
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mod_base= OTHER
/note= "phosphorothioate linkages and all cytidine
residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                           Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:514.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "2'-0-methocyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mod_base= OTHER
/note= "2'-0-methoxyethyls"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
  GGGCTACCTGGAGAGCTG 525
                        20 GGCCTACCTGGGGAAGCTG 2
                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-SEP-2002; 2002US-0413549P
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                                                                                                                                                  ADM14327 standard; DNA; 20
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                                                                                                                                                                                                                                   (first entry)
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*tag=
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                                                                                                                                                                                            ADM14327;
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antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGBS-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGBS-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer ischammit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
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                                                                                                                                                                                                                                                                                                                                                       disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, ophthalmic, immunological, cardiovascular or neurological disorder.
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antisense oligonucleotides and antisense compounds have cytostatic,
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Pred. No. 4.5e+02;
0; Mismatches 2;
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ng H;
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23-APR-2002; 2002WO-US013143.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.9%;
Best Local Similarity 89.5%;
Matches 17; Conservative
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SANDRASAGRA A.
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SHAHABUDDIN
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MILLER S.
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CONG H.
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cytostatic; senescence; cell proliferation; neoplastic cell growth; cellular gene expression; reverse transcriptase PCR; RT-PCR; primer; ss; doxorubicin-induced sensescence; HCT 116 cell; human. allergic rhinitis, acute respiratory distress syndrome, pulmonary hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide of the Identifying a compound that induces senescence in a mammalian cell, useful for treating abnormal cell proliferation, comprises assaying expression of a cellular gene in the cell in the presence and in the absence of a compound. Score 15.8; DB 1; Length 20; Pred. No. 4.5e+02; 0; Mismatches 2; Indels Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other; BTG2 gene antisense primer seqid 68. 535 AGCCCCATCTTGACAAGC 553 20 AGCCCCATGTGTGACAAGC 2 ADP18326 standard; DNA; 20 BP. 21-DEC-2001; 2001US-00032264. 21-DEC-2000; 2000US-0257907P. 17-DEC-2001; 2001US-0341425P. 0.9%; 89.5%; (first entry) Query Match
Best Local Similarity 89.5 Roninson IB, Chang B; (RONI/) RONINSON I B. WPI; 2004-294237/27. CHANG B. JS2004058320-A1. Homo sapiens. 29-JUL-2004 25-MAR-2004. invention ADP18326; CHAN/) RESULT 245 ADP18326, $\chi_{\alpha} \chi_{\alpha} \chi_{\alpha$ à 원

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Gaps

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The invention describes a method of identifying a compound that induces senescence in a mammalian cell. The method comprises: culturing the mammalian cell in the presence and absence of the compound; assaying expression of at least one cellular gene selected from 73 genes given in the specification, in the cellular gene selected from 73 genes given in the specification, in the cellular gene is higher in the presence of the compound; and identifying compounds that induce senescence when expression of at least one of the cellular gene is higher in the presence of the compound hat induces senescence in a mammalian cell identified from a compound that induces senescence in a mammalian cell identified from the method above; assessing efficacy of a treatment of a disease or condition relating to abnormal cell proliferation or neoplastic cell growth; and identifying a compound that inhibits senescence-associated induction of cellular gene expression. Compounds that induce senescence in abnormally proliferating or neoplastic cells are useful for treating a disease or condition relating to abnormal cell proliferation or neoplastic cells growth. This sequence represents a reverse transcriptase or expression of the presence of the real growth sequence represents a reverse transcriptase or condition and senescence and represent folly incured and represent following real province of the recommended and represent following recommended and recommended and recommended and recommended and recommend
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to antisense oligonucleotides targeted to cyclindependent kinase 6, and which inhibit the expression of cyclin-dependent kinase 6. The antisense oligonucleotides are useful for treating a disease or condition associated with cyclin-dependent kinase 6, such as a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding cyclin-dependent kinase 6, useful for treating cancer, bacterial/viral infection or conditions involving aberrant
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Example 2; SEQ ID NO 68; 29pp; English.
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Matches 17; Conservative
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hyperproliferative disorder (e.g. cancer), or conditions arising from bacterial or viral infections, or involving aberrant apoptosis. They are also useful in research and diagnostics for modulating the expression of cyclin-dependent kinase 6. The present sequence represents a cyclin-dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also used in the sequence listing but these sequences do not match seqid 15-134 displayed in Tables 1 and 2 (page 30-34).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to antisense oligonucleotides targeted to cyclin-dependent kinase 6, and which inhibit the expression of cyclin-dependent
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/note= "Phosphorothioate backbone, All cytidines are 5-
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                                                                                                                                                                                                         Score 15.8; DB 1; Length 20;
Pred. No. 4.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cyclin-dependent kinase 6, antisense oligonucleotide #156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense therapy; cyclin-dependent kinase 6;
hyperproliferative disorder; cancer; bacterial infection;
viral infection; apoptosis; 88; probe; human.
                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                   Sequence 20 BP; 1 A; 9 C; 5 G; 5 T; 0 U; 0 Other;
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Local Similarity 89.5%;
Les 17; Conservative
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ADO56092 standard; DNA; 20
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ADO56092/c
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                   disease or condition associated with cyclin-dependent kinase 6, such as a hyperproliferative disorder (e.g. cancer), or conditions arising from bacterial or viral infections, or involving aberrant apoptosis. They are also useful in research and diagnostics for modulating the expression of cyclin-dependent kinase 6. The present sequence represents a cyclin-dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also used in the sequence listing but these sequences do not match seqid 15-134 are also 134 displayed in Tables 1 and 2 (page 30-34).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jagged 1; serrate gene; JAG 1; HJ1; AGS; AHD; AWS; diagnosis; hyperproliferative disorder; developmental disorder; cytostatic; therapy;
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The antisense oligonucleotides are useful for treating a
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                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
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                                                                                                                                                                                                                                                                                                                                                                        Score 15.8; DB 1;
Pred. No. 4.5e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human jagged 1 target oligonucleotide #4.
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Best Local Similarity 89.5%;
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADP68073 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-399731/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2004102401-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human; ss.
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10017621-381.rng

(first entry)

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AAF97316 standard; DNA; 21 BP
                                     06-JUN-2001
 /note= "Phosphorothioate backbone where all cytidines are 5-methyl cytidines"
                                                                                                       Jagged 1; serrate gene, JAG 1; HJ1; AGS; AHD; AMS; diagnosis; hyperproliferative disorder; developmental disorder; cytostatic; therapy; human; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention is directed to antisense oligonucleotides targeted to jagged 1 (also known as serrate gene, JAG1, HJ1, AGS, AHD and AWS) and which modulate the expression of jagged 1. The invention is useful in diagnosing and treating hyperproliferative and developmental disorders. The invention acts as a cytostatic agent. The present sequence is human jagged 1 antisense oligonucleotide. This sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                New compound targeted to a nucleic acid molecule encoding jagged 1, useful in diagnosing and treating hyperproliferative disorder.
                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "2' -methoxyethyl (2' -MOE) nucleotides"
16. 20
16. 20
/mod_base= OTHER
/note= "2' -methoxyethyl (2' -MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 4.5e+02;
tive 0; Mismatches 2; Indels
                                                                                     Human jagged 1 antisense oligonucleotide ISIS #171247.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 15; 40pp; English
                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                       /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                           ADP68037 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                 22-NOV-2002; 2002US-00304082.
                                                                                                                                                                                                                                                                                                                                                                                    22-NOV-2002; 2002US-00304082.
                                                                 (first entry)
                                                                                                                                                                                                                                             *tag= a
                                                                                                                                                                                    *tag=
                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                          Dean NM, Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-399731/37.
                                                                                                                                                                                                                                                                                                                          US2004102401-A1
                                                                                                                                                                           Key
modified_base
                                                                                                                                                                                                                                    modified base
                                                                                                                                                                                                                                                                          modified base
                                                                                                                                               Homo sapiens
                                                                  12-AUG-2004
                                                                                                                                                                                                                                                                                                                                              27-MAY-2004
                                                                                                                                                         Synthetic.
                                               ADP68037;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
        RESULT 249
ADP68037/c
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The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided diagnosis of atherosclerosis, myocardial infartion, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also correlations to diseases. The present sequence is an example of one of the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                       polymorphism; vascular disease; coronary arrery disease; forensics; myocardial infarction, atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                               /standard_name= "single nucleotide polymorphism"
                                                        Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.8; DB 1; Length 21;
89.5%; Pred. No. 4.7e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 2 A; 5 C; 8 G; 6 T; 0 U; 0 Other;
Human gene single nucleotide polymorphism #2077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bolk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (WHED ) WHITEHEAD INST BIOMEDICAL RES. (MILL-) MILLENNIUM PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gargill M, Ireland JS,
                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example; Page 189; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1027 CTGGCTGACTTTGGCCTGG 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
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                                                                                                                                                                                                                                                                                      replace (11, T)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-SEP-1999; 99US-0153357P.
26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-0225724P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CICGGIGACITIGGCCIGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-226749/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                 WO200118250-A2
                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lander ES,
                                                                                                                                                                                                                                                                                      Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAH62396
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAH62396
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; 0

Gaps

0

877 GATGACTGTGGGAACATCA 895

ò 셤

17; Conservative

Local Similarity

Best Loc Matches

GATAACTGTGCGAACATCA 2

20

RESULT 250

Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD; hypettension; congenital heart defect; acrtic stenosis; valve disease; partial septal defect; arrioventricular canal defect; ductus arteriosus; pulmonary stenosis; subsortic stenosis; ventricular septal defect; VSD; tuberous sclerosis; soleroderma; atherosclerosis; infectious disease; baskinson's disease; immune disorder; haematopoietic disorder; primer; haemophilia; hypercoagulation; Crohn's disease; cancer.

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Ношо
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The sequences Annual of the present segments of industry sequences Annual standard is included in the invention for analysing a nucleic acid sample, which consists of the invention for analysing a nucleic acid sample, which consists of actermining the base occupying any one of the polymorphic sites given in the SNP containing sequences. The nucleotide sequences can be used in the diagnosis or monitoring of diseases, such as cancer, inflammation, heart diseases, diseases of the cardiovascular system, and infection by microorganisms. The oligonucleotides are also useful in the manufacture of a medicament for the treatment or prophylaxis of the diseases, and as a pharmaceutical. SNP containing oligonucleotides are useful in medicine such as phenotype correlation, forensics, paternity testing, medicine and genetic analysis DNA sequences AAH62100 - AAH62688 represent segments of human genes which New nucleic acid segments of the human genome, particularly from genes including polymorphic sites, for phenotype correlation, forensics, paternity testing, medicine and genetic analysis. Revised record issued on 09-SEP-2004 : Correction to Feature Table Key Single nucleotide polymorphism; SNP; human; cancer; inflammation; /*tag= a /standard_name= "single nucleotide polymorphism" 0.9%; Score 15.8; DB 1; Length 21; 89.5%; Pred. No. 4.7e+02; heart disease; paternity testing; forensic science; ds Sequence 21 BP; 5 A; 5 C; 8 G; 3 T; 0 U; 0 Other; NFE2L1 polymorphism containing DNA fragment #297. (WHED) WHITEHEAD INST BIOMEDICAL RES. Location/Qualifiers Lander ES; Claim 1; Page 53; 80pp; English. 17-NOV-2000; 2000WO-US031639 99US-0167334P (first entry) Ireland JS, WPI; 2001-367705/38. WO200138576-A2 24-NOV-1999; Unidentified sapiens 31-MAY-2001. 09-SEP-2004 12-SEP-2001 Cargill M, variation Query Match

2001US-0282930P. 2001US-0282934P. 2001US-0283712P. 2001US-0283710P. 2001US-028535P. 2001US-028538P. 2001US-028581P. 2001US-0285609P. 2001US-028560P. 2001US-028560P.

2001US-0281086P. 2001US-0281136P. 2001US-0281863P. 2001US-0281906P. 2001US-0282020P.

06-APR-2001;

03-APR-2002; 2002WO-US010780.

WO200281498-A2

17-OCT-2002

Homo sapiens

2001US-0299276P. 2001US-0318750P. 2001US-0324800P.

25-SEP-2001;

2001US-0324802P. 2001US-0325684P. 2001US-0330143P.

2001US-0332131P. 2001US-0332240P. 2001US-0332115P.

2001US-0332779P

2001US-0337621P. 2002US-0345783P.

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Gaps

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2; Indels

0; Mismatches

17; Conservative

Matches

Local Similarity

GGAGGACCTGCAGCGTGAC 20 43 GGAGGACCAGCAGTGTGAC 61

ABX72455 standard; DNA; 22 BP.

Human NOVX DNA PCR primer #120

(first entry)

03-JUN-2003

ABX72455;

RESULT 252
ABX72455/C
1D ABX724
XX
AC ABX724
XX
DT 03-UUN
XX

2001US-0294164P. 2001US-0294484P. 2001US-0298952P. 2001US-0299237P.

18-JUN-2001; 29-MAY-2001;

2001US-0287213P. 2001US-0288257P.

27-APR-2001;

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Gerlach V;
n SJ, Ji W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated NOVX polypeptide useful for treating atherosclerosis, metabolic disorders, diabetes, obesity, infectious disease, anorexia, neurodegenerative disorders, Alzheimer's disease and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             UM, Spytek KA;
Vernet CAM, Zerhusen BD;
on G, Burgess CE, Gerlac
Taupier RJ, Casman SJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stone DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                            A. Kekuda R, Miller CE, Marya....

Lurajan M, Liu X, Gusev VY, Li L, Vernec,

Lurajan M, Liu S, Pena CEA, Smithson G, Burgess J,

Inan L, Shency SG, Pena CEA, Smithson G, Burgess J,

Inan L, Shimkets RA, Gangolli EA, Taupier RJ, Ca

The M, Rastelli L, Edinger SR, Stone

The Mazur A, Millet I, Pe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 83; Page 545; 666pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Guo X, .... M, Dru ... Penturajan M, Dru ... Gorman L, Shenoy SG, Pena ... M, Shimkets RA, G
                                                                                                                                                                                                                                                                                                                                                                                                                                                (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-046858/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Padigaru M, Shi
Anderson DW, Le
Macdougall JR,
Ellerman K;
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cardlomyopathy, diabetes, hypertension, congenital heart defects, aortic stenosis, atrial septal defect (ASD), atrioventricular canal defect, ductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular septal defect (VSD), valve diseases, tuberous sclerosis, scleroderma, atherosclerosis, obesity, infectious disease, anorexia, neurodegenerative disorders, Alzheimer's disease, parkinson's disease, immune disorders, haematopotetic disorders, hamphilia, hypercoagulation, Crohn's disease and cancer. This sequence represents a PCR primer used to amplify a human The invention relates to human polypeptides, termed NoVX, and the polypuraleotides encoding them. The polypeptides and polymucleotides are useful for diagnosing disease, and screening for potential therapeutic agents. The sequences are useful for treating metabolic disorders, Sequence 22 BP; 4 A; 8 C; 4 G; 6 T; 0 U; 0 Other; NOVX polynucleotide of the invention \$

2; Indels 0.9%; Score 15.8; DB 1; Length 89.5%; Pred. No. 4.9e+02; Live 0; Mismatches 2; Indels 17; Conservative Query Match Best Local Similarity Matches

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Gaps

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22;

846 GTACCTGGACAAGGACCTG 864 20 Graccigasasastactis 2 ò 셤

AAH47509 standard; DNA; 23 AAH47509; AAH47509

BP

Forward primer used in the construction of plasmid pSM847. (first entry) 30-NOV-2001

Cloning vector; pSM843; rep gene; ORF81; trbA; parA; cad operon; antibiotic resistance; cadmuim; SoxA; SoxB; SoxC; sox enzyme; Rhodococcus; sulfur; fossil fuel; promoter; PCR primer; ss.

Synthetic.

EP1127943-A2

29-AUG-2001.

19-FEB-2001; 2001EP-00200582.

24-FEB-2000; 2000IT-MI000332.

(ENIE) ENITECNOLOGIE SPA

De Ferra F, Rodriguez F; Serbolisca LP, Margarit Y RosI,

WPI; 2001-551402/62.

Plasmid vector of Rhodococcus for producing proteins such as enzymes involved in the removal of organic sulfur from fossil fuels, comprises a parA gene, genes encoding proteins involved in replication, and a genetic

Example 7; Page 8; 24pp; English.

The invention provides a cloning vector pSM843, comprising the rep genes ORF81 and trbA (encoding proteins involved in replication in Rhodococcus), the gene parA, and at least one gene which encodes a genetic marker (selected from the cad operon) that confers resistance to cadmuim or an antibiotic. The rep genes are useful for producing homologous or heterologous proteins of interest such as enzymes involved in the selective removal of organic sulfur from fossil fuels (SoxA, SoxB, SoxC), L-amino acids, enantiomorphs of chiral compounds and carboxylic acids in a microorganism. The proteins are preferably sox enzymes. Microorganisms such as Rhodococcus, Gordona and Nocardia containing the sox operon downstream to the constitutive promoter, in particular

. 0 Rhodococcus strain SMV114 CBS 102447, transformed with the vector are useful for removing organic sulfur from fossil fuels. The expression vector has high stability in the absence of selective pressure in the transformed strains of Rhodococcus. The present sequence represents a PCR primer used in the construction of the vector pSM847 Gaps antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian; anticonvulsant; pulmonary disease; restencosis; Alzheimer's; Parkinson's; epilepsy; dementia; huntingcon's; amyotrophic lateral sclerosis; gene therapy; target; ss; CDK2. .; Score 15.8; DB 1; Length 23; Pred. No. 5.1e+02; 0; Mismatches 2; Indels double-stranded short interfering nucleic acid; siNA; Sequence 23 BP; 7 A; 4 C; 7 G; 5 T; 0 U; 0 Other; CDK2 siNA-target RNA - SEQ ID 30. 414 GAGAGTGCGTATGCGCAAC 432 5 GAGAGTGCATATGCGGAAC 23 ADG29464 standard; RNA; 23 BP 0.98; 89.58; 2002US-0358580P. 2002US-0363124P. 2002US-0386782P. 2002US-0406784P. 2002US-0408378P. 2002US-0409293P. 20-FEB-2003; 2003WO-US005028 26-FEB-2004 (first entry) 17; Conservative Best Local Similarity WO2003074654-A2 29-AUG-2002; 05-SEP-2002; 09-SEP-2002; Unidentified 20-FEB-2002; 11-MAR-2002; 06-JUN-2002; 12-SEP-2003 ADG29464; Query Match Matches RESULT 254 ADG29464 8888888 ò g

The invention relates to a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene comprising one or more chemical modifications and each strand of the double-stranded siNA comprises about 21 nucleotides. The siNA of New double-stranded short interfering nucleic acid molecule, useful for down-regulating the expression of an endogenous mammalian target gene or for treating diseases that respond to modulation of gene expression or the invention demonstrates antiarteriosclerotic, neuroprotective, nootropic, antiparkinsonian and anticonvulsant activities and may be useful for down-regulating the expression of an endogenous mammalian target gene and therefore in the treatment of any disease or condition that responds to modulation of gene expression or activity in a cell, tissue or organism. The disease or condition may include pulmonary Example 24; SEQ ID NO 30; 593pp; English. WPI; 2003-731676/69. activity.

Beigelman L, Chowrira B, Pavco P, Fosnaugh K;

Thompson J;

Usman N,

Mcswiggen J,

Jamison S,

(SIRN-) SIRNA THERAPEUTICS INC

2003US-0440129P.

15-JAN-2003;

88888888

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The invention relates to human Myb protein 32 (AAM49156) and to nucleic acids encoding it (ABL55121). The protein has a molecular weight of 32 Kb. The invention also relates to a method for the recombinant production of the protein, an antagonist of the protein, and the use of the protein, gene and antagonist in therapeutic applications. Myb protein 32 can be used in the treatment of a variety of diseases such as cancer and HIV (human immunodeficiency virus) infection. Sequences ABL55122-ABL55123 represent reverse transcription-PCR (RT-PCR) primers used in an exemplification of the invention to isolate human Myb protein 32 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Polypeptide-human Myb protein 32 and polynucleotide for coding it, useful for treating cancer, and HIV infection.
                                                                                                                                         Human, Myb protein 32; recombinant production; cancer; HIV infection; human immunodeficiency virus; gene therapy; cytostatic; anti-HIV; reverse transcription-PCR; RT-PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vascular endothelial growth factor receptor KDR RT-PCR primer #5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vascular endothelial growth factor receptor; KDR; VEGFRII; VEGFR, haematopoietic stem cell population; FCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15.8; DB 1; Length 24; 89.5%; Pred. No. 5.3e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 24 BP; 2 A; 12 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                               Human Myb protein 32 RT-PCR primer, SEQ ID NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 17 (Disclosure); 33pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (BODE-) BODE GENE DEV CO LTD SHANGHAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        558 CAGCCGCCGCCTCCGTCGT 576
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCCGCCGCCGCCGT
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                                                                                                                                                                                                                                                                                                                                                                                                          26-MAY-2000; 2000CN-00115890
                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAY-2000; 2000CN-00115890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZS6474 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-196654/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
nes 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xie Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-MAR-2000
                                                  31-MAY-2002
                                                                                                                                                                                                                                                                                                        CN1325886-A.
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                                                                                                                                                                                                                                                                                                                                                           12-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ56474;
  ABL55122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mao Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ56474
  g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                           ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel polypeptide-human ribosomal protein S4-18.04 and polynucleotide for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to human ribosomal protein S4-18.04 (see ABB98784). The protein and its coding sequence can be used for treating several diseases, such as malignant tumours, haemopathy, HIV infection, immunological disease and various inflammations. The present sequence is a PCR primer, which was used in an example from the invention
diseases such as restenosis, atherosclerosis, Alzheimer's disease, barkinson's disease, epilepsy, dementia, huntington's disease, or amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for gene therapy applications. The current sequence is that of the siNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human, ribosomal protein S4-18.04; tumour; haemopathy; HIV infection; immunological disease; inflammation; cytostatic; anti-HIV; PCR; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.8; DB 1; Length 24;
89.5%; Pred. No. 5.3e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                    Ouery Match 0.9%; Score 15.8; DB 1; Length 23; Best Local Similarity 63.2%; Pred. No. 5.1e+02; Matches 12; Conservative 5; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 24 BP; 8 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                    Sequence 23 BP; 7 A; 6 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human ribosomal protein S4-18.04 PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 17 (Disclosure); 33pp; Chinese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
                                                                                                                                                                                                                                                                                                              1022 TCAAGCTGGCTGACTTTGG 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATCTTTGACAAGCCCCTC 558
                                                                                                                                                                                                                                                                                                                                        ABL55122 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABV74691 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCTTTGAGAAGCACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-SEP-2000; 2000CN-00125506
                                                                                                    target DNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-SEP-2000; 2000CN-00125506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-584314/63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xie Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CN1345823-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABV74691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mao Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 255
ABV74691/C
XX
ABV74691/C
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ABV7465
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O3-FEB
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16-AUG-2001; 2001US-0312902P.
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                              (CURA-) CURAGEN CORP.
                                                                                                                                    WPI; 2002-599789/64.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-JUL-1991;
                                                                         Casman SJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
20-JUN-1993
                                                                                          Gerlach V,
                                                                                                        Peyman JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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    8
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                                                                                                                                                                                                   The present invention describes a method for preparing a cell population enriched for long-term repopulating human haematopoietic stem cells. The method comprises obtaining a population of cells from human haematopoletic tissue and isolating a population of KDR+ cells. KDR is a human vascular endothelial growth factor receptor (VEGFRII). The novel cell population can be used to inhibit rejection of a transplanted organ, by administering the KDR+ cells of the donor to a tissue recipient. The present sequence represents a reverse transcription PCR primer, which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; G-protein coupled receptor; GPCR; cardiomyopathy; atherosclerosis; diabetes; cell signal processing; metabolic pathway modulation; cancer; adenocarcinoma; lymphoma; prostate cancer; uterus cancer; asthma; immune response; neurodegenerative disorder; inflammatory disorder; Crohn's disease; multiple sclerosis; Albright hereditary osteodystrophy;
                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.9%; Score 15.6; DB 1; Length 22; Best Local Similarity 81.8%; Pred. No. 5.3e+02; Matches 18; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human G-protein coupled receptor, forward primer #76.
                                                                                                                                                                                                                                                                                                                                                      Sequence 22 BP; 8 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                       used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                            47 GACCAGCAGTGTGACTGCTGAA 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACAAGGAGTGTGACCACTGAA 22
                                                                                                                                              Preparation of a cell population.
                                         DI SANITA
                                                                                                                                                                            Example; Page 45; 83pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0257876P.
2001US-0259743P.
2001US-0260148P.
2001US-0261498P.
2001US-0263689P.
2001US-0267464P.
                          (UYJE-) UNIV JEFFERSON THOMAS (SUPE-) INST SUPERIORE DI SAN
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2001US-0284591P.
2001US-0285718P.
2001US-0299327P.
98US-0087153P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABS59078 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                    Peschle C;
                                         (SUPE-) INST SUPERIOR (ZIEG/) ZIEGLER B L.
                                                                                                                 WPI; 2000-086715/07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           primer; PCR; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200259313-A2
29-MAY-1998;
                                                                                      Ziegler BL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-JAN-2001;
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08-FEB-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-DEC-2000;
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19-JUN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 258
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The invention relates to novel isolated G-protein coupled receptor (GPCR)

Complypeptides and polynucleotides. The GPCR polypeptide, GPCR nucleic acid
and antibody are useful for treating, preventing or alleviating a GPCR-
associated disorder or a pathological state in a subject, particularly a
company modulation. The GPCR polypeptide and nucleic acid are also useful
cor diagnosing the presence of or predisposition to a disease associated
cor diagnosing the presence of or predisposition to a disease associated
with altered levels of GPCR, particularly cancer. The GPCR nucleic acid
complications for disorders associated with aberrant GPCR expression or
activity. The DNA encoding the protein is useful in gene therapy for
creating the above conditions. Furthermore, the nucleic acids and
colypeptides are useful in treating adenocarcinoma, lymphoma, prostate
cancer, uterus cancer, immune response, neurodegenerative disorders,
cancer, uterus cancer, immune response, meurodegenerative disorders,
cancer, uterus cancer, immune response,
cancer also useful in developing a
concer, uterus cancer, immune response,
cancer also useful assay system for functional analysis of various human disorders,
as well as in diagnostic applications. ABS58747-ABS59231 represent human
concert.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
Colman SD, Spytek KA;
Malyankar UM, Edinger S;
Macdougall JR, Gunther E;
                                                                                                                                                                                                                                                                                                                                 New G protein coupled receptor polypeptides and polynucleotides, useful in gene therapy, particularly for treating or preventing cardiomyopathy, atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.6; DB 1; Length 22;
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                                                                                                                                              Millet I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 22 BP; 3 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. 5.3e+02;
Padigaru M, Kekuda R,
M, Shenoy SG, Gusev V,
5, Stone DJ, Sciore P,
K, Gangolli EA, Millet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              820 GAGAAGTCCCTCACCCTTGTCT 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGGAAGTTCCTTACCCTTTTCT 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 9; Page 467; 685pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
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(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 81.8
Matches 18; Conservative
                                             Vernet CAM,
                                                                                                 Smithson G,
                                                                                                                                              Ellerman K,
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(HOFF) HOFFMANN LA ROCHE INC.

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A series of synthetic probes were tested for their ability to hybridise to specific bacterial species in the CSF. For the detection of streptococcus agalactiae probe KG00001 lacking 2 bases from the 5' end gives an improved detection rate. See also AAQ37314-60. (Updated on 25-
                                                                                                                                                                       A series of synthetic probes were tested for their ability to hybridise to specific bacterial species in the CSF. For the detection of Streptococcus agalactiae probe VP109 lacking 2 bases from the 5' end gives an improved detection rate. See also AAQ37314-59. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                  Detecting bacteria causing meningitis in cerebrospinal fluid - by amplifying target regions and detecting using panel of probes which includes universal bacterial probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Detecting bacteria causing meningitis in cerebrospinal fluid - by amplifying target regions and detecting using panel of probes which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cerebrospinal fluid; CSF; 16S rRNA; meningitis; 8s.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Probe for Streptococcus agalactiae 16S rRNA gene fragments.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.9%; Score 15.6; DB 1; Length 23;
                                                                                                                                                                                                                                                                                                0.9%; Score 15.6; DB 1; Length 23; 81.8%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 23 BP; 7 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                     Sequence 23 BP; 8 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                               585 ATCTGAGATTGGCTTTGGGAAA 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    amplifying target regions and detecincludes universal bacterial probe.
                                                                                                                                                                                                                                                                                                                                                                                  1 AACTGAGATTGGCTTTAAGAGA 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 5; Page 29; 65pp; English.
                                                                                                                                                 Example 5; Page 29; 65pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               91US-00738393
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                  18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Leong DU;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1993-076541/09.
                                                        WPI; 1993-076541/09.
                          Greisen KS, Leong
                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9303186-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Greisen KS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bacterium;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ37359;
                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
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Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Detection of nucleic acid mutations - by electrophoresis in polyacrylamide gel that distinguishes heteroduplexes from homoduplexes
                                                                                                                                                                                                                                                                             IV817 acceptor splice site, PCR primer, detection; base-pair mutation, heteroduplex; homoduplex; migration; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mutation in the human IVS17 3'-acceptor splice site
                                                                                                                                                                                                                                                   Human IVS17 3'-acceptor splice site PCR primer #9.
                 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
81.8%; Pred. No. 5.5e+02; ive 0; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                585 ATCTGAGATTGGCTTTGGGAAA 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36 GTAGGCAGGAGGACCAGCAGTG 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GAAGCCAGGAGCACCAGCAATG 22
                                                                            23 Aactigagartiggcrirraagaga 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Col 5; 16pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rock MJ, Prockop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYJE-) UNIV JEFFERSON THOMAS.
                                                                                                                                                           ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93US-00061574.
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                                                                                                                                                           AAX02161 standard; DNA; 23
                                                                                                                                                                                                                       (first entry)
                 18; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-179967/15
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Les 18; Conserv
   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                           06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                             23-FEB-1999.
                                                                                                                                                                                                                       23-APR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ganguly A,
                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                          AAX02161;
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                                                                                                                              RESULT 261
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                 Matches
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The present invention relates to diagnosing or monitoring transplant rejection, e.g. cardiac or kidney transplant rejection, in an individual comprises detecting the expression level of one or more genes. The methods, system and kits are useful in diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreaticistet, lung, bone marrow or stem cell transplant rejection, and individual. The method is also useful in assessing the immune status of an individual. The methods are also useful in diagnosing and monitoring diseases that involve the immune system, e.g. rheumatoid arthritis, lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or viral, bacterial or fungal infection. The present sequence represents a Taqman probe for a 50 mer oligonucleotide marker for diagnosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic islet, lung, bone marrow or stem cell transplant rejection, in an individual, comprises detecting the expression level of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
                                                                                          transplant rejection; immune system; rheumatoid arthritis; lupus;
inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.9%; Score 15.6; DB 1; Length 23; Best Local Similarity 81.8%; Pred. No. 5.5e+02; Matches 18; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   monitoring of allograft rejection and other disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 23 BP; 6 A; 12 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 58; SEQ ID NO 1368; 1762pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP specific upper PCR primer SEQ ID 3513.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          979 GACCTCAAGCCCCAGAACCTGC 1000
                                                                                                                                                                                                                                                                                                                                                                    EXPR-) EXPRESSION DIAGNOSTICS INC
                                                          Tagman probe of the invention #42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            decerchaceaceachaceree 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAH40717 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                        24-APR-2003; 2003WO-US012946.
                                                                                                                                                                                                                                                                                                            24-APR-2002; 2002US-00131831.
20-DEC-2002; 2002US-00325899.
                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                             Wohlgemuth J, Fry K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-400724/37.
                                                                                                                                                                                           WO2004042346-A2.
                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                               Rosenberg S;
                    12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-AUG-2001
                                                                                                                                                                                                                                 21-MAY-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 263
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Prentice J, Morris M;

Woodward R, Ly N,

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Sequences AAH17205 - AAH40944 represent PCR primers, single nucleotide

CC primer extension (SNPE) primers, and the sequences of regions flanking

Sites of single nucleotide polyworphisms SNPs. The present invention

collodes kits for determining the presence or absence of a SNP, using the

includes kits for determining the presence or absence of a SNP, using the

collognucleotides are useful for genotyping a nucleic acid sample by

performing a single-nucleotide primer extension reaction. The

collognucleotides are useful for determining the presence, absence or

collognucleotides are useful for determining the presence, absence or

clantity of a SNP and for genotype of an individual or group of

collognucleotides are useful for determining the presence, absence or

identity of a SNP and for genotype of an individual or group of

collognucleotides are useful for determining the presence, absence or

collognucleotides are useful for determining the presence, absence or

collognucleotides are useful for determining the presence, absence or

collognucleotides are useful for determining the presence of being

caused by one or more SNPs. Phenotypic trait suspected of being

caused by one or more SNPs. Phenotypic traits include disease e.g.

caused by one or more SNPs. Phenotypic traits include disease

caused by one or more sNPs. Phenotypic traits and individual or group of

disease of which a component is or susceptibility to multifactorial

cdisease of which a component is or may be genetic such as autoimmune

cdiseases, including, rheumatoid arthritis, multiple sclerosis,

concer, and concer, nervous system diseases and infection by pathogenic

microorganism. The method is also useful in forensic investigations and

content to a numan SNP containing DNA sequence

contents a pergament sequence

contents and acute intervence represents a PCR primer specific

contents and acute intervence represents a PCR primer specific
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acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Morphology regulator; dimorphic fungal cell; fungal host organism; recombinant protein expression; growth; low viscosity; protein secretion; filamentous fungus; PKAC; primer; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ORCH-) ORCHID BIOSCIENCES INC.
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                                                                                                                                                                                                                                                                                                                                                                            13-OCT-2000; 2000WO-US028436.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Picoult-Newburg L,
                                                                                                                                                                                                            WO200129262-A2
                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acid sample.
                                                                                                                                                                                                                                                                                                 26-APR-2001
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    8 \frac{1}{2} 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fruit fly; LRR47 polypeptide 47-33.88; embryonic development deformity; tumour; diabetes; menstrual disorder; peptide ulcer; arrhythmia; anaemia; epilepsy; reverse transcriptase PCR; RT-PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                    New isolated polynucleotide encoding at least one regulator of morphology capable of regulating the morphology of a dimorphic fungal cell, useful for producing and/or secreting large quantities of commercially valuable
                                                                                                                                                                                                                                                      Jacobsen MD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15.6; DB 1; Length 24;
Pred. No. 5.8e+02;
7; Mismatches 4; Indels
                                                                                                                                                                                                                                                        Arnau J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fruit fly LRR47 polypeptide 47-33.88, RT-PCR primer 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 24 BP; 2 A; 3 C; 2 G; 7 T; 0 U; 10 Other;
CAMP-dependent protein kinase A catalytic subunit.
                                                                                                                                                                                                                                                        Poulsen U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     974 ACCGAGACCTCAAGCCCCAGAAC 996
                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; Page 120; 296pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23 AYMGNGAYYTNAARCCNGARAAY 1
                                                                                                                                                                                                                                                        Petersen JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-SEP-2000; 2000CN-00125025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%;
Local Similarity 52.2%;
les 12; Conservative
                                                                                                                                     08-MAR-2002; 2002WO-DK000157.
                                                                                                                                                                     08-MAR-2001; 2001DK-00000395.
12-MAR-2001; 2001US-0274650P.
                                                                                                                                                                                                                        (BIOT-) BIOTEKNOLOGISK INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABK90912 standard; DNA;
                                                                                                                                                                                                                                                          Wolff AM, Appel KF,
                                     Mucor circinelloides
                                                                                                                                                                                                                                                                                         WPI; 2002-723266/78.
                                                                      WO200270721-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Drosophila sp
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABK90912;
                                                                                                                                                                                                                                                                                                                                                                              proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 265
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The invention relates to an oligonucleotide array (1) comprising at least 25 different addresses (adapter sequences) with each comprising a different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (1) is useful for immobilising a target nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Array comprising adapter sequences useful for immobilizing or detecting a target nucleic acid sequence, has different addresses comprising different specific capture probes.
                                                                                                                                                                                              The present invention relates to a new fruit fly LRR47 polypeptide 47-33.88. The polypeptide is useful for curing several diseases, such as embryonic development deformity, tumour, diabetes, menstrual disorder, peptide ulcer, arrhythmia, anaemia and epilepsy. The present nucleic acid sequence represents a reverse transcriptase (RT)-PCR primer that was used in the methods of the invention to isolate the coding sequence of the
                                                                                                                           fruit fly LRR47 polypeptide 47-33.88, useful for curing e.g. tumors and
                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                               Score 15.6; DB 1; Length 24; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide array; adapter sequence; probe; ss.
                                                                                                                                                                                                                                                                                                                   Sequence 24 BP; 1 A; 8 C; 13 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                       Example 3; Page 18 (Disclosure); 33pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide adapter/capture probe 10078
                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                    (SHAN-) SHANGHAI BIODOOR GENE DEV CO LID.
                                                                                                                                                                                                                                                                                         fruit fly LRR47 polypeptide 47-33.88
                                                                                                                                                                                                                                                                                                                                                                                                             753
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                                                                                                                                                                                                                                                                                                                                                                                                              732 GGCACCCTGCACCGCCATCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
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29-AUG-2000; 2000US-0228854P.
                                                                                                                                                                                                                                                                                                                                                    0.9%;
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            05-SEP-2000; 2000CN-00125025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABQ10087 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 11.5-
-دمر 18; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-292068/33.
                                                                                               WPI; 2002-520716/56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-JUN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABQ10087;
                                                                                                                                               diabetes
                                                                     Mao Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 266
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Oligonucleotide array; adapter sequence; probe; ss.

27-AUG-2001; 2001WO-US026519.

WO200216649-A2.

Synthetic

28-FEB-2002

Oligonucleotide adapter/capture probe 3106

11-JUN-2002

ABQ03115;

ABQ03115 standard; DNA; 24

ABQ03115

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ABQ13409) to a target nucleic acid to form a modified target nucleic acid and contacting the modified target nucleic acid with (I). The steps of above method is useful for detecting a target nucleic acid, which further comprises detecting the presence of the modified target nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          comprising adapter sequences useful for immobilizing or detecting a t nucleic acid sequence, has different addresses comprising
                                                                                                                                                                 Gaps
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0
                                                                                                                        0.9%; Score 15.6; DB 1; Length 24; larity 81.8%; Pred. No. 5.8e+02; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.9%; Score 15.6; DB 1; Length 24;
31.8%; Pred. No. 5.8e+02;
ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide array; adapter sequence; probe; ss.
                                                                                     Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 24 BP; 4 A; 4 C; 9 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide adapter/capture probe 10119
                                                                                                                                                                                             542 TCTTTGACAAGCCCCTCAGCCG 563
                                                                                                                                                                                                                       3 TCCTGGACAAGACCCTCAACCG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               different specific capture probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 213; 261pp; English
                                                                                                                                                                                                                                                                                                                         ВР
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29-AUG-2000; 2000US-0228854P.
                                                                                                                                                                                                                                                                                                                      ABQ10128 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ILLU-) ILLUMINA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-292068/33.
                                                                                                                                         Local Similarity
les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200216649-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-FEB-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                           ABQ10128;
                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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                                                                                                                                                                                                                                                                                      RESULT 267
                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                         ABQ10128/
                                                                                                                                                                                                                                                                                                                                      00000x8
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25 different addresses (adapter sequences) with each comprising a different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (1) susful for immobilishing a target nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-ABQ13409) to a target nucleic acid to form a modified target nucleic acid and contacting the modified target nucleic acid above method is useful for detecting a target nucleic acid, which further comprises detecting the presence of the modified target nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                               Array comprising adapter sequences useful for immobilizing or detecting a target nucleic acid sequence, has different addresses comprising different specific capture probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an oligonucleotide array (I) comprising at least
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; K-ras, PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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0
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llarity 81.8%; Pred. No. 5.8e+02;
Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Capture oligonucleotide Zip ID#1097 oligo #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           542 TCTTTGACAAGCCCCTCAGCCG 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTGGACAAGACCCTCAACCG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 118; 261pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                         25-AUG-2000; 2000US-0227948P.
29-AUG-2000; 2000US-0228854P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABI84591 standard; DNA;
                                                                                                                                                                                                                                                                                                                       (ILLU-) ILLUMINA INC
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-292068/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                      Gunderson K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-FEB-2002
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TCTTTGACAAGCCCCTCAGCCG 563

542 22

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81.8%;

Local Similarity

Conservative

18;

Matches

RESULT 268

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Kliman R;

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(CORR ) CORNELL RES FOUND INC
                                                                                                                 04-APR-2001; 2001WO-US010958.
                                                                                                                                                                       14-APR-2000; 2000US-0197271P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the present invention
                                                                                                                                                                                                                                                                                                  Barany F, Zirvi M,
                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-034366/04.
WO200179548-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-FEB-2002
                                                           25-OCT-2001
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Matches
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IID AB1E
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XX XX AB1E
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XX AB1
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The present invention describes a method (MI) for designing capture oligomuclectide probes (I) for use on a support to which complementary oligomuclectide probes (II) will hybridise with little mismatch, where coligomuclectide probes (II) will hybridise with little mismatch, where coligomuclectide probes (II) will hybridise with little mismatch, where coligomuclecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoforames, Candida albicans and Aspergillus funigatutus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents e.g. Selected from Onchowerava volvulus, Entameba histolytica and Dracunculus comedinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

CC selected from Onchowerava volvulus, Entameba histolytica and Dracunculus cirvolved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the popert at the particular sites and identifying if ligation of the oligomuclectide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.9%; Score 15.6; DB 1; Length 24;
81.8%; Pred. No. 5.8e+02;
tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 24 BP; 3 A; 6 C; 8 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Capture oligonucleotide Zip ID#235 oligo #3.
                                                                                                                                                                                                                                                                                                                                      Favis R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1118 TCCTGCTTGGGTCCACGGACTA 1139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 5; Fig 25; 300pp; English.
                                                                                                                                                                                                                                                                                                                                         Gerry NP,
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                                                                                                                                                                                                                                                                      (CORR ) CORNELL RES FOUND INC
                                                                                                                                                                                                      14-APR-2000; 2000US-0197271F.
                                                                                                                                   04-APR-2001; 2001WO-US010958
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WO200179548-A2
                                                                   25-OCT-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the present interface a method (mil) to despining depoute oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents of Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal finectious agents e.g. Cryptococcus neoformans, Candida albicans and Appergillus fundautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents comedinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

Concer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically associated with a gene selected from BRCA1 gene, method is also used for environmental monitoring, forensics and the food method is also used for environmental monitoring, forensics and the food cand feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the concurred and correlating (using elemental fightion to a series of the support at the concurred and correlating (using ecomprise and ingenized to a scanning and the food the support and compute of the oligonucleotide probe and correlating (using ecompanies and members and the food the support and contract of the concurred and correlating (using ecompanies and algernate of the concurred and correlating despinate and computed to a scanning and the food and correlating (using ecompanies and indicating order and ecomputed and correlating to a member and and correlating envisors and feed to a scanning and the food and correlating events and ecomputed and correlating envisors and feed to a scanning expected to a scanning expected to a scanning expected to a scanning expected to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention describes a method (M1) for designing capture
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·
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81.8%; Pred. No. 5.8e+02;
Live 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                    Favis R, Kliman R;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Capture oligonucleotide Zip ID#235 oligo #2.
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Synthetic

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The present invention describes a merica (Mi) for despining capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where (I) have meelting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus funigatutus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus funigatutus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically associated with a gene selected from BRCA1 gene, method is also used for environmental monitoring, forensics and the cancers. The method is also used for environmental monitoring (using e.g. a scanning electron microscope and infrared microscope) the support at the cancer and infrared microscope) the support at the particular sites and infrared microscope) the support at the particular sites and infrared microscope) the support at the particular sites and infrared microscope) the support at the particular sites and infrared microscope) the support at the particular sites and infrared microscope) the support at the particular sites and infrared microscope. Allestic of the particular sites and infrared microscope and particular gland (and the support at the particular sites and infrared microscope. Allestic of the particular sites and infrared microscope. Allestic of the particular sites and infrared microscope. Allestic of the particular sites and infrared microscope.
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                                                                                                                                                                                                                                                                                                                  Favis R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 3; Fig 26; 300pp; English.
                                                                                                                                                                                                                                                                                                              Gerry NP,
                                                                                                                                                                                                                                                 (CORR ) CORNELL RES FOUND INC
                                                                                                                          04-APR-2001; 2001WO-US010958.
                                                                                                                                                                                    14-APR-2000; 2000US-0197271P.
                                                                                                                                                                                                                                                                                                              Barany F, Zirvi M,
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   WO200179548-A2
                                                             25-OCT-2001
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Kliman R;

Gaps 0 0.9%; Score 15.6; DB 1; Length 24; 31.8%; Pred. No. 5.8e+02; ve 0; Mismatches 4; Indels Sequence 24 BP; 7 A; 8 C; 6 G; 3 T; 0 U; 0 Other; 81.8%; Local Similarity 81.8 ses 18; Conservative Query Match Best Loc Matches

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ABI92133 standard; DNA; 24 BP RESULT 272 ABI92133

ABI92133;

15-FEB-2002

Capture oligonucleotide Zip ID#235 oligo #4. (first entry)

Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCAL; BRCAC; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

Synthetic.

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Detecting cancer involving oncogenes, thunk suppressor genes, or cancer involving oncogenes, thunk suppressor genes, or cancer is specification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               oligonucleotide probes (1) for use on a support to which complementary oligonucleotide probes (1) will hybridise with little mismatch, where (1) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformens, Candida albicans and Aspergillus funigaucus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamocba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
                                                                                                                                                                                                                                                                                                                                                   Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
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0.9%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 5.8e+02;
Matches 18; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                     Kliman R;
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                                                                                                                                                                                                                                                     Favis R,
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                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 3; Fig 26; 300pp; English.
                                                                                                                                                                                                                                                     Gerry NP,
                                                                                                                                                                                                (CORR ) CORNELL RES FOUND INC
                                                                                                04-APR-2001; 2001WO-US010958.
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                                                                                                                                                                                                                                                  Barany F, Zirvi M,
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WO200179548-A2
                                              25-0CT-2001
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Capture oligonucleotide Zip ID#235 oligo #1. rcriectrescrecarssacs 24 ABI82866 standard; DNA; 24 BP (first entry) 15-FEB-2002 ABI82866; RESULT 273 ABI82866, g

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Human, K-ras, PCR primer; probe, capture probe, mutation detection, ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

Synthetic

10017621-381.rng

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The present invention describes a method (M1) for designing capture oligonucleotide probes (I) will hybridise with little mismatch, where coligonucleotide probes (II) will hybridise with little mismatch, where coligonucleotide probes (II) will hybridise with little mismatch, where coligonucleotide probes (II) will hybridise with little mismatch, where see of salmonella, listeria monocytogenes and Haemophilus influenza, fungal infectious agents or conformans, Candida albicans and conformans, virus and parasitic infectious agents or selected from Onchoverva volvulus, med parasitic infectious agents captered from Onchoverva volvulus, man parasitic infections agents or selected from Onchoverva volvulus, promered histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such concert involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically associated with a gene selected from BRCA1 gene, ps3 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental montoring, forensics and the food and feetching comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sessor or absence of the target undercost sequences. ABL82074 to a presence or absence of the target undercost and the exemplification or a present oligonucleotide sequences used in the exemplification.
                                                                                                                                                                                                                                                                                                                                               Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
                                                                                                                                                                                                                                               Favis R, Kliman
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                                                                                                                                                                                                                                                    Gerry NP,
                                                                                                                                                                                                   (CORR ) CORNELL RES FOUND INC
                                                                                                  04-APR-2001; 2001WO-US010958.
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WO200179548-A2
                                                 25-OCT-2001
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Gaps
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0
                                Match 0.9%; Score 15.6; DB 1; Length 24; Local Similarity 81.8%; Pred. No. 5.8e+02;
                                                                     4; Indels
Sequence 24 BP; 7 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
                                                                       0; Mismatches
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Matches
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1118 TCCTGCTTGGGTCCACGGACTA 1139
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ABI84590 standard; DNA; 24 BP
                                                        (first entry)
                                                        15-FEB-2002
                                     ABI84590;
RESULT 274
AB184590/c
XX
AC AB1845
XX
DT 15-FEB
XX
NW Human,
XW SW SApthe
XX SYRHE
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Capture oligonucleotide Zip ID#1097 oligo #1.

Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR, p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

chicken embryonic stem cell; B lymphocyte; polyclonal antibody; PCR; primer; ss; human; immunoglobulin heavy chain; VH4-4. PCR primer 1 used to amplify human Ig heavy chain VH4-4 region.

WO2003081993-A2

09-OCT-2003

Homo sapiens.

ADL61761 standard; DNA; 24 BP.

ADL61761

20-MAY-2004 (first entry)

ADL61761;

Synthetic

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The present invention describes a method (M1) for designing capture oligonuclectide probes (II) for use on a support to which complementary oligonuclectide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoforamas, Candida albicans and Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents e.g. Eslected from Onchoverva volvulus, Entamoeba histolyfica and Dracunclus captured from Onchoverva volvulus, Entamoeba histolyfica and Dracunclus as 1 hydroxylase deficiency, Turner Syndrome and obesity defects.

CC medinesis. The method is also useful for detecting genetic diseases such as 1 hydroxylase deficiency, Turner Syndrome and obesity defects.

CC petecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from ERCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the cc particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to
                                                                                                                                                                                                                                                                                                                                   Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
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11.8%; Pred. No. 5.8e+02;
ve 0; Mismatches 4; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 24 BP; 5 A; 6 C; 9 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                        Favis R,
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                                                                                                                                                                                                                                           Gerry NP,
                                                                                                                                                                                           (CORR ) CORNELL RES FOUND INC
                                                                                             04-APR-2001; 2001WO-US010958.
                                                                                                                                           14-APR-2000; 2000US-0197271P.
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Best Local Similarity 81.8
Matches 18; Conservative
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WO200179548-A2
                                                25-0CT-2001
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Leighton P,

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The invention relates to a novel composition comprising a sustained culture of chicken embryonic stem (ES) cells with a transgene stably integrated into the genome of substantially all of the progeny of the ES cells, which contribute to B lymphocytes of a chimeric chicken produced by the injection of the ES cell progeny into a chicken embryo. The composition of the invention may be useful for preparing human polyclonal antibodies for human therapy. The current sequence is that of the PCR primer 1 of the invention which was used to amplify human immunoglobulin heavy chain VH4-4 region.
                                                                                                                            New composition comprising a sustained culture of chicken embryonic stem (ES) cells, useful for preparing human polyclonal antibodies for human
                                                                                                                                                                                                                                                                                                                     Sequence 24 BP; 10 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                             Example 6; SEQ ID NO 17; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                            CCTGCTCAAGGACCTCAAACAC 783
            24-MAR-2003; 2003WO-US009288.
                                  22-MAR-2002; 2002US-00104057.
                                                        (ORIG-) ORIGEN THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                Etches RJ, Kay RM,
                                                                                                     WPI; 2003-812491/76.
                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                     18;
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1 cerecadadadeareadades 22 BP. ADI03803 standard; DNA; 24 (first entry)

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Gaps

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0.9%; Score 15.6; DB 1; Length 24; 81.8%; Pred. No. 5.8e+02; ive 0; Mismatches 4; Indels

LI-0; medicament; gene expression; LY6G6C; LY6G6D; LY6G5E; LY6G5C; LY6G5B; PCR; primer; ss. Mouse Ly6g6d cDNA analysing primer MG6DRT2.

WO2004001034-A2 ds Mus

31-DEC-2003

20-JUN-2003; 2003WO-GB002652. 24-JUN-2002; 2002GB-00014524 (MEDI-) MEDICAL RES COUNCIL

Campbell RD, Mallya M;

Aguado B,

WPI; 2004-099121/10.

New isolated nucleic acid molecule comprising a part of the sequence of intron 1 of a human LY-6 superfamily gene or of a homologous gene from an animal, useful for preparing a medicament to regulate gene expression in subjects

Example 3; Page 38; 59pp; English

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         The invention relates to an isolated nucleic acid molecule comprising at least part of the sequence of intron 1 of a human LY-6 superfamily gene or of a homologous gene from an animal, or a corresponding sequence. The sequence comprises at least part of intron 1 of a gene selected from all LY-6 genes, CD59, uPAR, SP10, SLURP-I, E48, RIG-E, PSCA, ThB and TSA-LY-6xa2. The nucleic acid molecule is useful in preparing a medicament to regulate the expression of a gene in a subject. Sequences AD103768-AD103810 represent primers used in cDNA analysis of human and mouse MHC class III region LY-6 superfamily members (LY6G6C, LY6G6D, LY6G6E, LY6G5C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
                                                                                                                                                                                                                                                 Gaps
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0
                                                                                                                                                                                                               Score 15.6; DB 1; Length 24;
Pred. No. 5.8e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human ERG Amberzyme target sequence Seq ID No 1904.
                                                                                                                                                                                 Sequence 24 BP; 5 A; 6 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                              1288 ATCCTGTCCAACGAGGTTCA 1309
                                                                                                                                                                                                                                                                                                         23 ATCCCGACCAACTGGGAGTTCA 2
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Best Local Similarity 81.03,
دوبات: الله Conservative
                                                                                                                                                                                                                                                                                                                                                                                     ABK19257 standard; RNA; 17
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useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome. Randi AM; Novel polynucleotide which down regulates expression of Ets-related useful for treating cancer, diabetic retinopathy, macular decemenati Jarvis T, Von Carlowitz I, Mcswiggen JA, Mclaughlin F, (RIBO-) RIBOZYME PHARM INC. (GLAX) GLAXO GROUP LTD. WPI; 2002-082995/11.

16-MAY-2001; 2001WO-US015866. 16-MAY-2000; 2000US-00572021

WO200188124-A2. Homo sapiens

22-NOV-2001

Claim 4; Page 124; 149pp; English

The invention relates to a nucleic acid molecule (1) which down regulates expression of an Ets-related gene (ERG). (1) is useful for treating conditions selected from cancer, lymphoma, Bwing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, neovascular glaucoma, myopic degeneration, arthritis, psoriasis, veruca vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu

cc treating a patient having a condition associated with the level of ERG, treating a patient having a condition associated with the level of ERG, by contracting cells of the patient with (1) under conditions suitable for the treatment. The method comprises the use of one or more therapies conder conditions suitable for the treatment. Leukaemia or tumour conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (1) is useful for reducing ERG activity in a cell, by contacting (1) with RNA, in the presence of a divalent cation such as Ng2+. (1) is useful for diagnosis of conditions and cation such as Ng2+. (1) is useful for diagnosis of conditions and cataon such as Ng2+. (1) is useful for grangestic tool to cataon such as hare homedogy within diseased cells or to detect the presence of ERG RNA in a cell. (1) is useful for specifically caramine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (1) is useful for specifically caramine genes that share homology with ERG gene or ERG funion genes. ABK1334-ABK22719 represent nucleic acids, including antisense and catated PCR primers of the invention Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;

0.9%; Score 15.4; DB 1; Length 17; 12.4%; Pred. No. 4.6e+02; ve 2; Mismatches 1; Indels 1295 CCAACGAGGAGTTCAAG 1311 ccaaceeeaacucaae 17 Best Local Similarity 82.4%; Matches 14; Conservative Query Match ò

ABS75018 standard; DNA; 17 (first entry) 24-DEC-2002 ABS75018; RESULT 278

BP.

PAPP-B; human; pregnancy associated plasma protein B; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; Human PAPP-Ea associated 17-mer SEQ ID 544. US2002102252-A1. Homo sapiens

dysgenetic pregnancy; primer; ss. 06-APR-2001; 2001US-00827998. 01-AUG-2002.

26-MAY-2000; 2000US-0207456P. GU Y. SHANNON M E. (GUYY/)

WPI; 2002-697817/75. Shannon ME; Gu Y,

New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy

Example 2; Page 146; 353pp; English

This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of

dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention

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Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Gaps .. Length 17; 1; Indels Score 15.4; DB 1; Pred. No. 4.6e+02; 0; Mismatches 0.9%; 94.18; Conservative Local Similarity es 16; Conserv Query Match Matches

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303 17 287 AACTICGTICTGCACGG 1 AACTICGIICIGCAAGG g à

ABK57128 standard; RNA; 17 RESULT 279 ABK57128

ВР

02-JUL-2002

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Gaps

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ABK57128;

Human CLCAl gene enzymatic nucleic acid #1499.

Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic; acetylcysteine

Homo sapiens.

WO200211674-A2.

14-FEB-2002

09-AUG-2001; 2001WO-US024970.

09-AUG-2000; 2000US-0224383P

(RIBO-) RIBOZYME PHARM INC. (SYNT) SYNTEX USA LLC.

THOMPSON J

THOM/)

Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma. WPI; 2002-217145/27. Grupe A;

Szymkowski DE;

Ayers D,

Mckenzie T,

Mcswiggen J,

rhompson J,

Claim 4; Page 96; 152pp; English.

The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to

Best Local Similarity

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The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, inverted to a condition related to while it is neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least the 2'-O-methyl modifications, phosphorothicate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic molety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid molecule that modulates replication of West Nile Virus
examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an enzymatic nucleic acid molecule of the invention
                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis; liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
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                                                                                                                0.9%; Score 15.4; DB 1; Length 17; 70.6%; Pred. No. 4.6e+02; Live 4; Mismatches 1; Indels
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                                                                            Sequence 17 BP; 4 A; 5 C; 4 G; 0 T; 4 U; 0 Other;
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(MCSW/) MCSWIGGEN J A.
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0.9%; Score 15.4; DB 1; Length 17;

Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
                 Gaps
                                                                                                                                                                                                                                                                                                WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis; liver fallure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
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14.1%; Pred. No. 4.6e+02;
ve 0; Mismatches 1; Indels
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Pred. No. 4.6e+02;
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                                                                                                                                                                                                                                                                   WNV Amberzyme substrate SEQ ID NO 6747.
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                                                                                                                                                                  ACN06744 standard; RNA; 17 BP.
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(MCSW/) MCSWIGGEN J A.
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amplification primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligomucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in virco as (auti) sense reagents; and (2) for production of recombinant polypeptides. The oligomucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
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                                                                                                                                                                                                                                           Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                    Murine oligonucleotide associated with tumour supression, SEQ ID 3103
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94.1%; Pred. No. 4.6e+02;
ve 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 393; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       127 GATCGGATGAAGAAGAT 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB
                                                                     ACC65856 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-2002; 2002WO-IB004210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT12600 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                               01-JUL-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-333167/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                   schizophrenia; ss
                                                                                                                                                                                                                                                                                                                                                                                                         WO2003025176-A2
                                                                                                                                                                                                                                                                                                                                                               musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT12600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                   ACC65856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                               Mus
                                                     ACC65856
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The present sequence is that of a PCR primer used for isolating the 3'-end of a cDNA sequence coding for the human protease designated Ty which is related to the interleukin-1 beta converting enzyme (ICE) and which induces apoptosis. The Ty protein has over 70% homology to Tx which converts the p30 precursor of ICE into 20 kD and 10 kD fragments and can be used for treating diseases which respond to ICE, e.g. inflammation. The ability to induce apoptosis will be useful for treating cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                         New DNA encoding human protease(s) that induce apoptosis - and cause maturation of interleukin converting enzyme, useful e.g. in treating
                                                                                                                                                                                                                                                                                                      Su MS;
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                                                                                                                                                                                                                                                                                                      Lalanne J, Livingston DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.4; DB 1;
Pred. No. 5.1e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 3; Page 26; 88pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1452
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                                                                                                                                                                                                                                                                                                      Hercend T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cdk3 ribozyme binding site #7.
                                                                                                                                                     95WO-FR001035.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.9%;
Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1436 AGGATGCCATGAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18 AGGATGCCATGAGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAA82722 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                         (ROUS ) ROUSSEL-UCLAF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-412314/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                            autoimmune diseases
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                                                                                                                                                                                                                                                                                                         Faucheu C,
                                                                                                                                                                                                                                                                                                                                                            WPI; 1996-129403/13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200032765-A2
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                                                  WO9604387-A1
                                                                                                                                                     01-AUG-1995;
                                                                                                                                                                                                        02-AUG-1994;
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                                                                                                     15-FEB-1996
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tritz R,
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Gaps

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0.9%; Score 15.4; DB 1; Length 19; 94.1%; Pred. No. 5.18+02; ive 0; Mismatches 1; Indels

719

703 AAGGAGATCAGACTGGA

Conservative

Local Similarity Les 16; Conserv

Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

exemplification of the present invention

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nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, defermatological, vycostatic, antisebortheic, antidabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell cardinoma and viral or sebortheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vireoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAHSTSTT to AAHGSTSTT to AAHGSTST to A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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                  8 \frac{1}{2} 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                   The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in AAA88415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytchine involved in lifiammation, matrix metalloproteinase (MMP), cyclin, call-cycle dependent kinase, growth factor or a reductase, or administering a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:308.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch 0.9%; Score 15.4; DB 1; Length 19; l Similarity 94.1%; Pred. No. 5.1e+02; 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                 Disclosure; Page 50; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 94; 408pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAH57884 standard; DNA; 19 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        restenosis treatment
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         PCNA and Cyclin Bl.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-MAY-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidiabetic; antiinflammatory; antiathmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening;
                                                                                                                                                       Mitogen activated protein kinase sinA oligonucleotide SEQ ID NO:205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated protein kinase genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chowrira
                                                                                                                                                                                                                                                                                      genetic engineering; pharmacogenomic; gene mapping; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Haeberli P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; SEQ ID NO 205; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mcswiggen J, Beigelman L, Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SIRN-) SIRNA THERAPEUTICS INC.
                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0363124P.

2002US-0386782P.

2002US-0406784P.

2002US-0408378P.

2002US-0408378P.
2 AAGAAGATCAGACTGGA 18
                                                                                                                                                                                                                                                                                                                                                                                                   28-JAN-2003; 2003WO-US002510.
                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0358580P.
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                                                                      ADE29583 standard; RNA; 19
                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-689980/65.
                                                                                                                                                                                                                                                                                                                                            WO2003072590-A1.
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11-MAR-2002;
06-JUN-2002;
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                                                                                                                             29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                        04-SEP-2003
                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                 ADE29583;
                                            RESULT 286
                                                         ADE29583/
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that downregulates expression of a mitogen-activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of siNA; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; and (4) conjugates and/or containing these vectors. MAPK siNAs car be used to modulate the expression of MAPK genes, in cells, clissue explants or organisms, e.g. for treating obesity; diabetes types I conjugate explants or organisms, e.g. for treating obesity; diabetes types I conjugate shock, rheumatoid arthritis, psoriasis and inflammatory because the conjugates and inflammatory dispenses. The transfer of clentification and validation; generic engineering; diagnosis; target conjugate the mapping (e.g. of single-nucleotide conjugated by the present sequence represents a MAPK sinA which is used in the examplification of the present sequence represents a MAPK sinA which is used in the example fication of the present sequence represents a MAPK sinA which is used in the example fication of the present sequence represents a MAPK sinA which is used in the example fication of the present sequence represents and present sequence.
present invention describes a short interfering nucleic acid (siNA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the exemplification of the present invention.
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Sequence 19 BP; 7 A; 6 C; 6 G; 0 T; 0 U; 0 Other;

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Gaps
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Score 15.4; DB 1; Length 19;
Pred. No. 5.1e+02;
0; Mismatches 1; Indels
                                                        1035 CTTTGGCCTGGCCGAG 1051
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    0.9%;
 Query Match
Best Local Similarity 94.1
Matches 16, Conservative
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Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:42. ADE29420 standard; RNA; 19 BP. 29-JAN-2004 (first entry) ADE29420; RESULT 287 ADE29420

short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorecitic; antidiabetic; antiinflammatory; antiasthmatic; immunosuppressive; antibacterial; antitheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatorid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.

Synthetic.

WO2003072590-A1.

04-SEP-2003

28-JAN-2003; 2003WO-US002510

2002US-0363124P. 2002US-0386782P. 2002US-0406784P. 2002US-0408378P. 2002US-0358580P. 29-AUG-2002; 05-SEP-2002; 09-SEP-2002; 11-MAR-2002; 06-JUN-2002; 20-FEB-2002;

(SIRN-) SIRNA THERAPEUTICS INC

2003US-0440129P

L5-JAN-2003;

Chowrira B; Usman N, Haeberli P, Beigelman L, Mcswiggen J,

WPI; 2003-689980/65.

New short interfering nucleic acid, useful e.g. for treatment and

The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of a mitogen-activated protein kinase that downregulates expression of a mitogen-activated protein kinase codulating expression of MAPK genes in cells, tissue explants or corganisms by introduction of siNA; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; and (4) cerops that express siNA and cells containing these vectors. MAPK siNAs corposatatic, anorectic, antibabetic, antibacterial, antirheumatic, antipaoriatic and gastrointestinal activities. The MAPK siNAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obssity; diabetes types I cell and II; a wide range of tumours, and inflammatory diasease (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel cell disease). They can also be used for drug screening; diagnosis; target diseases. They can also be used for drug screening; diagnosis; target intentification and validation; genetic engineering; pharmacogenomics; cudentification of the present invention. ö Gaps downregulates expression of mitogen-activated ; 0 Score 15.4; DB 1; Length 19; Pred. No. 5.1e+02; 1; Indels Sequence 19 BP; 0 A; 6 C; 6 G; 0 T; 7 U; 0 Other; 4; Mismatches Example 3; SEQ ID NO 42; 164pp; English 1035 CTTTGGCCTGGCCCGAG 1051 0.9%; Query Match 0.9 Best Local Similarity 70.6 Matches 12, Conservative protein kinase genes.

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Human ERG2-targeted siRNA - SEQ ID 1304. BP. ADF85010 standard; RNA; 19 26-FEB-2004 (first entry) ADF85010; RESULT 288 ADF85010

short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2; v-ets erythroblastosis virus E26 oncogene like (avian). 2002US-0363124P. 2002US-0386782P. 2002US-0404039P. 2002US-0406784P. 2002US-0408378P. 2002US-0409293P. 2003US-0439922P. 20-FEB-2003; 2003WO-US005234. WO2003070972-A2 05-SEP-2002; 09-SEP-2002; 14-JAN-2003; Homo sapiens 20-FEB-2002; 11-MAR-2002; 06-JUN-2002; 15-AUG-2002; 29-AUG-2002; 28-AUG-2003

Chowrira B; Mcswiggen J, Beigelman L, (RIBO-) RIBOZYME PHARM INC

2003US-0440129P

15-JAN-2003;

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The invention relates to short interfering nucleic acids (siNA) which
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05-SEP-2002;
09-SEP-2002;
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                                                                                    The invention relates to a novel double-stranded short interfering nucleic acid (siNA) that downregulates expression of the breakpoint cluster region—val Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human ERG2 (v-ets erythroblastosis virus B26 oncogene like (avian))—targeted siRNA of the invention.
                     New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2; v-ets erythroblastosis virus E26 oncogene like (avian).
                                                                                                                                                                                                                                                                                                                                                                                                                                                     interfering nucleic acid; siNA; breakpoint cluster region;
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                                                                                                                                                                                                              Sequence 19 BP; 6 A; 5 C; 6 G; 0 T; 2 U; 0 Other;
                                                                 Example 7; SEQ ID NO 1304; 197pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                              Human ERG2-targeted siRNA - SEQ ID 1480.
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2002US-0408378P.
2002US-0409293P.
2003US-0439922P.
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2002US-0386782P.
2002US-0404039P.
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                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                           14; Conservative
WPI; 2003-679889/64.
                                                                                                                                                                                                                                               Local Similarity
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06-JUN-2002; 2
15-AUG-2002; 2
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05-SEP-2002;
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                                                                                           nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates expressatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of targeted siRNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytostatic; vasotropic; nephrotropic; cerebroprotective; treating leukaemia; solid tumors; restenosis; polycystic kidney disease; bronchiolitis; glomerulonephritis; stroke; RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; micro-RNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; human; platelet derived growth factor receptor; PDGFr; ss.
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                                                                     The invention relates to a novel double-stranded short interfering
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94.1%; Pred. No. 5.1e+02;
tive 0; Mismatches 1;
Example 7; SEQ ID NO 1480; 197pp; English.
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11-MAR-2002; 2002US-0363124P.
06-JUN-2002; 2002US-0386782P.
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2002US-0408378P.
2002US-0409293P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
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downregulate expression of the human platelet-derived growth factor receptor (PDGFr) gene by RNA interference. The sinAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the sinAs include short interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain (expressed from a cector or enzymatically synthesised, the invention also relates to kits for the in vitro or in vivo delivery of siRNA, conjugates and/or complexes of siRNA; and vectors that express siNA. The siNAs are used to modified expression of the pDGFr gene in cells, tissue explants or coganisms (e.g., by ex vivo gene therapy), or in grafts and transplants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants or creating leukaemia and solid tumours, restenosis, polycystic (sidney disease, bronchiolitis, glomerulomephritis and stroke. The siMNs are also the present sequence represents the lower strand of a human PDGFr transcript
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; vasotropic; nephrotropic; cerebroprotective; treating leukaemia; solid tumors; restenosis; polycystic kidney disease; bronchiolitis; glomerulonephritis; stroke; RNA interference; short interfering RNA; since double-stranded RNA; micro-RNA; micro-RNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; therapeutic target identification; pharmacogenomics; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; human; platelet derived growth factor receptor; PDGFr; ss.
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19 BP; 7 A; 6 C; 5 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
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06-UUN-2002; 2002US-0386782P.
29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0409293P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16; Conservative
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                   target sequence.
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The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human platelet-derived growth factor creceptor (PDGFY) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and may be double or single stranded. They comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA, double-cs tranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA). The siNAs can be unmodified or chemically modified, can contain decoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siRNA, conjugates and/or complexes of siRNA, and vectors that express siNA. The siNAs are used to complexes of siRNA, and vectors that express siNA, the siNAs are used to organisms (e.g., by ex vivo gene therapy), or in grafts and transplants of treating leukaemia and solid tumours, restenosis, tissue explants or treating leukaemia and solid tumours, restenosis, polycystic kidney classes, bronchiolitis, glomerulomephritis and stroke. The siNAs are also cuseful for drug screening, diagnosis, therapeutic target identification and variety organismes (e.g., by ex vivo gene therapy), or in grafts and transplants of stroke. The sinka are also creating, diagnosis, therapeutic target identification converted double-stranded siNA, which is identical to the PDGFr transcript
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                                                                           New short interfering nucleic acid, useful e.g. for treatment and diagnosis of tumors, downregulates expression of the platelet-derived
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54.7%; Pred. No. 5.1e+02;
ive 5; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 1 A; 5 C; 6 G; 0 T; 7 U; 0 Other;
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                                                                                                                                                                Example 3; SEQ ID NO 161; 148pp; English.
Chowrira B;
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98IL-00126627.
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                                                                                                                         growth factor receptor gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ18214 standard; DNA; 20
Mcswiggen J, Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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                                       WPI; 2003-731605/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9934016-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ18214;
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell the pattern of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is can individual, e.g. a fetus. They can also be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for detecting a containing the coftaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AAZ17803-Z18342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, protein phosphatase genes, P450 enzyme genes, steroid receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; NOVX; cytostatic; cardiant; antinflammatory; immunosuppressive; antiallergic; haemostatic; anti-HIV; antidiabetic; antiarteriosclerotic; antorectic; antiasthmatic; nephrotropic; antiarthritic; hepatotropic; neuroprotective; nootropic; antibacterial; virucide; antiparasitic; relaxant; anticonvulsant; hypoteneive; vasotropic; antiparkinsonian; vulnerary; angiogenic; antiangiogenic; gene therapy; vaccine; cancer; cardiomyopathy; atherosclerosis; hypertension; diabetes; inflammation; autoimmuno disorder; allergy; hod disorder; AIDS; obesity; asthma; acquired immunodeficiency syndrome; nephropathy; cirrhosis; arthritis; Alzheimer's disease; Parkinson's disease; goitre; infection; stroke;
                                                                                                                                                           Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               muscular dystrophy; epilepsy; wasting disorder; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 3 A; 2 C; 7 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        superfamily genes or cadherin superfamily genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human NOV4b reverse PCR primer SEQ ID NO:199.
                                                                                                                                                                                                                                Claim 4; Page 48; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1024 AAGCTGGCTGACTTTGG 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACF03629 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AAGGIGGCIGACTITGG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-NOV-2001; 2001WO-US051580.
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Best Local Similarity 94.1
                                                                                           WPI; 1999-419113/35
(GENE-) GENENA LTD
                                                                                                                   P-PSDB; AAY14748
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACF03629;
                                               Vider B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 293
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cardiomyopathy, atherosclerosis, cancer, diabetes, asthma, inflammation, autoimmune disorders, alergies, blood disorders, obesity, acquired immunodeficiency syndrome (ALDS), immunoglobulin (Ig)A nephropathy, cirrhosis, arthritis, Alzheimer's disease, Parkinson's disease, goitre, infections (e.g. bacterial, viral, parasitic), stroke, muscular dystrophy, epilepsy, and other wasting disorders associated with chronic diseases. ACF03571 to ACF03644 represent PCR primers and probes for NOVX sequence, which are used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, and
in chromosome mapping, tissue typing or pharmacogenomics.
                                                                                                                                                                                                                                                                                                                                    ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          New NOVX polypeptide useful for preventing or treating NOVX-associated
                                                                                                                                                                                                                                                      Grosse WM, Macdougall JR, Smithson G, Millet I, Stone DJ;
Gunther E, Ellerman K, Alsobrook JP, Lepley DM, Burgess CE;
Spyrek KA, Edinger SR, Gangolli EA, Gorman L, Taupier RJ, Li L;
Guo X, Fernandes ER, Vernet CAM, Tchernev VT, Casman SJ, Shenoy
Mishra V, Furtak K, Baumgartner JC, Colman SD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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94.1%; Pred. No. 5.3e+02;
lve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Page 293; 346pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1240 TICALCITCCGIATCTI 1256
                                        02-NOV-2000; 2000US-0245317P.
07-NOV-2000; 2000US-0246562P.
08-NOV-2000; 2000US-0246871P.
26-JAN-2001; 2001US-0264389P.
26-JAN-2001; 2001US-0264439P.
                    2000US-0245291P
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Matches 16; Conservative
                                                                                                                                                                                                                (CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-140359/13.
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ABC transporter; ABCT; major histocompatibility complex; MHC; cytostatic; hyperproliferative; autoimmune disorder; antisense gene therapy; inflammation; tumour formation; immunosuppressive; antimicrobial; human;

phosphorothioate backbone; antisense; ss

Homo sapiens

Human ABC transporter MHC I antisense oligonucleotide, ISIS 206615.

AAL62434 standard; DNA; 20

RESULT 294 AAL62434/c 06-OCT-2003 (first entry)

AAL62434;

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Human MOL protein related PCR primer Seq ID198.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a compound targetted to a nucleic acid molecule encoding ABC transporter (ABCT) major histocompatibility complex (MHC) I where the compound specifically hybridises with the nucleic acid molecule and inhibits expression of ATM or specifically hybridises with at least a portion of an active site on the nucleic acid molecule. The invention is useful for inhibiting the expression of ATM in cells or tissues. The invention is useful for treating an animal with hyperproliferative or autoimmune disorder. The invention is useful for diagnostics, therapeutics, prophylaxis, as research reagents and kits, for distinguishing functions of various members of a biological pathway and in antisense gene therapy. The invention is also useful prophylactically e.g., to prevent to relay infection, inflammation or tumour formaction. The present sequence is an antisense oligo targetted to human ABC transporter MHC I DNA. This sequence is used to illustrate the method of
                                                                                                                                                                                                                                                                                                                                                             New antisense compound that hybridizes and inhibits the nucleic acid encoding ABC transporter major histocompatibility complex 1, for treating diseases or conditions such as a hyperproliferative or autoimmune
                                                        /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
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14.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                              /mod_base= OTHER
/note= "2'methoxyethyl nucleotides'
                                                                                                                             'note = "2'methoxyethyl nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; Page 81; 112pp; English
                        Location/Qualifiers
                                                                                                                  /mod base= OTHER
                                                                                 methylcytidines"
                                                                                                                                                                                                                                                                                                                   Freier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     839 TCTTTGAGTACCTGGAC 855
                                                                                                                                                                                                                                            12-DEC-2002; 2002WO-US040101
                                                                                                                                                                                                                                                                   17-DEC-2001; 2001US-00024369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94.1%;
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                                                                                                      *tag= b
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Best Local Similarity 94.1'
Matches 16; Conservative
                                                                                                                                       .20
                                                                                                                                                      /*tag=
                                                                                                                                                                                                                                                                                                                Ward DT,
                                               *tag=
                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                         WPI; 2003-577305/54.
                                                                                                                                                                                                WO2003051309-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the invention
                                                                                           modified_base
                                                                                                                                        modified base
                                   modified base
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                                                                                                                                                                                                                                                                                                                  Borchers AH,
                                                                                                                                                                                                                       26-JUN-2003.
  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADD18363;
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ID ADD1
XX
AC ADD1
XX
DT 15-J
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Fernandes ER, Vernet CAM, Shimkets RA, Anderson DW, Padigaru M; Boldog FL, Li L, Shenoy SG, Casman SJ, Rastelli L, Alsobrook JP; Burgess CE, Grosse WM, Gusev VY, Ji W, Lepley DM, Liu X, Mezick AJ; Patturajan M, Shen L, Spaderna SK, Spytek RA, Szekeres ES; Taupier RJ, Tochernev VT, Zerhusen BD, Voss EZ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the DNA and protein sequences disclosed may prove useful for gene therapy. The protein, nucleic acid or antibody is useful for preparing a composition for treating or preventing a MOLX-associated disorder, for example cardiomyopathy, diabetes or atherosclerosis. The present sequence is that of a human PCR primer which was used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention relates to novel human nucleic acid sequences which encode
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          novel molecule (MOL) proteins numbered MOL1-23, referred to generally in the specification as MOLX. Compounds which modulate the function of the MOLX proteins of the invention, MOLX agonists or antagonists, may have cardiant, antidiabetic or antiarteriosclerotic activities. In addition,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New MOLX polypeptide, nucleic acid or MOLX-specific antibody, useful preparing a composition for treating or preventing a MOLX-associated disorder, e.g., cardiomyopathy, diabetes or atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                           cardiant; antidiabetic; antiarteriosclerotic; gene therapy; MOLX-associated disorder; cardiomyopathy; diabetes; atherosclerosis;
molecule protein; MOL protein; MOLX; MOLX agonist; MOLX antagonist;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
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44.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 198; 371pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUL-2011, 2001US-033341P.
26-SEP-2001, 2001US-03955212.
26-SEP-2001, 2001US-0966545.
26-SEP-2001, 2001US-0966546.
01-APR-2002, 2002US-036996P.
01-ARY-2002, 2002US-036996P.
03-MAY-2002, 2002US-038437P.
07-JUN-2002, 2002US-038437P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                2001US-0303168P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                   human; PCR; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-210304/20.
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les 16; Conserv
                                                                                                                                                                                                                                    WO2003003984-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUL-2001;
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                                                                                                                                                                       Homo sapiens
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                                                                                                                                                                                                                                                                                                     16-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADD56709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADD56709
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The present invention relates to a method for the direct comparison of numerical gene expression values between samples of genes. The method comprises amplifying cDNA in the presence of a compeditive template mixture and primer pairs for several genes and then amplifying aliquots of the PCR products using a primer pair specific for each gene. The method of amplification is by multiplex standardised reverse transcriptase-polymerase chain reaction (Starr-PCR). High density oligonucleotide or cDNA arrays are used to measure PCR products following quantitative Starr-PCR. The method is useful for the assessment of gene expression in small biological samples such as fine needle aspirate biopsies, and laser captured microdissected materials. The method allows for the standardised measurement of hundreds of genes from the same cample, which in prior art, could only be assessed for one gene. The present sequence represents a multiplex StaRT-PCR primer which can be used in the method of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct comparison of numerical gene expression values between samples of genes comprises using multiplex standardized reverse transcription-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           proliferation; cancer; cancer cell growth inhibition; human; PCR primer;
                                                Gene expression; multiplex standardised reverse transcriptase-PCR; StaRT-PCR; high density oligonucleotide array; cDNA array; small biological sample; fine needle aspirate biopsy; laser captured microdissected material; human; primer; ss.
               Human gene expression analysis multiplex StaRT-PCR primer #229.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 0 A; 10 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; SEQ ID NO 229; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human p21 gene PCR primer SEQ ID NO:46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             825 GTCCCTCACCCTTGTCT 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADF72079 standard; DNA; 20 BP
                                                                                                                                                                                                                                                          28-MAR-2002; 2002US-00109349.
                                                                                                                                                                                                                                                                                            28-MAR-2002; 2002US-00109349.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grecereceerrerer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polymerase chain reaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                        Willey JC, Crawford EL;
                                                                                                                                                                                                                                                                                                                               (WILL/) WILLEY J C. (CRAW/) CRAWFORD E L.
                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-811730/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                  US2003186246-A1
                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-FEB-2004
                                                                                                                                                                                                                       02-OCT-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADF72079;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 297
ADF72079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loca
Matches
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The present invention describes a method for determining whether an agent can be used to reduce the proliferation and/or cause the death of cancer cells or inhibit the growth of a cancer cell population. The method is useful in determining whether an agent can be used to reduce the proliferation and/or cause the death of cancer cells or inhibit the growth of a cancer cell population. The present sequence represents a PCR primer which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                      Determining whether an agent can be used to reduce the proliferation, cause the death or inhibit the growth of cancer cell population by obtaining a sample of cancer cells and quantifying the level of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NOVX; antidiabetic; anorectic; cardiant; hypotensive; antidiabetic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; noteopathic; antiarthritic; antidiaflammatory; dermatological; antiasthmatic; antilipaemic; metabolic; diabetes; obesity; infection; anorexia; cancer; cardiovascular; hypertension; atherosclerosis; neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune; osteoarthritis; haemopoietic; inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis; cell differentiation; proliferation; haemopoiesis; wound healing; angiogenesis; gene therapy; chromosome mapping; tissue typing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Forward PCR primer Ag2822 used to analyse human NOV expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.4; DB 1; Length 20;
4.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                  Demuth JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 0 A; 10 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                Graves TG,
                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 46; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pharmacogenomic; human; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                              expression of a marker in the cells.
                                                                                                                                                                                                               Warner KA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    825 GICCCICACCCITGICT 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADH17728 standard; DNA; 20 BP
                                                                                       27-MAR-2003; 2003WO-US009428.
                                                                                                                       28-MAR-2002; 2002US-0368288P.
28-MAR-2002; 2002US-0368409P.
                                                                                                                                                                             (MEDI-) MEDICAL COLLEGE OHIO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-MAY-2003; 2003WO-US013690,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4 Grecerececrierer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.9
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                Weaver DA,
                                                                                                                                                                                                                                                                     WPI; 2003-902899/82
                  WO2003082078-A2
                                                                                                                                                                                                                               Crawford EL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                    09-OCT-2003
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                                                                                                                                                                                                               Willey JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH17728;
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Gaps

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Homo sapiens

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20 AAGCAGGACCTGGATGA 4

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2002US-0384044P. 2002US-0384215P. 2002US-0384296P. 2002US-0384297P.

2002US-0384327P. 2002US-0384352P.

2002US-0385211P. 2002US-0393333P. 2002US-0402154P. 2002US-0402171P. 2002US-0402204P. 2002US-0402205P. 2002US-0405175P. 2002US-0406129P.

2002US-0412954P. 2002US-0414975P.

2002US-0420851P

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The invention relates to a novel isolated NOVX polypeptide. The cardiant, hyportensive, antiatteriosclerotic, anorectic, virucide, antibatteriosclerotic, anorectic, virucide, antibatteriosclerotic, oncropic, neuroprotective, antibatteriola, fungicide, protozoacide, nootropic, neuroprotective, antibatteriorial, fungicide, protozoacide, nootropic, neuroprotective, antibatkinsonian, anticonvulsant, osteopathic, antiarthritic, antiarthritic, antiarthritic, antiarthritic, antiarthritic, antiarthritic, antiarthritic, and protozoal, antiarthritic, and antibodies may be useful in the manufacture of a medicament for treating metabolic consorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, helminthic, and protozoal), anorexia, cancer, cardiovascular cdiseases including hypertension and atherosclerosis, neurodegenerative disorders such as osteoarthritis, haemopolatic disorders, infanmatory skin disorders asthma and various types of dyslipidaemis. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit neurogenesis, consideration, cell proliferation, hemopoiesis, wound healing and and and antipodies that modulate or inhibit meurogenesis, in gene therapy and the in generation of antibodies that bind immunospecifically to NoVX substances for use in therapeutic or diagnostic methods. The nucleic acids may be further used as the human end pharmacogenemics. The current sequence is that of the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 medicine and pharmacogenomics. The current sequence is that of the hv
NOVX-related PCR primer which was used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated NOVX polypeptide, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alvarez E, Anderson DW, Boldog FL, Catterton E, Edinger SR; Fernandes ER, Gerlach VL, Gorman L, Grosse WM, Guo X, Ji W; Kekuda R, Li L, Macdougall JR, Padigaru M, Patturajan M; Peterson JD, Rastelli L, Shimkets RA, Spytek KA, Stone DJ; Vernet CAM, Voss EZ, Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example C; SEQ ID NO 418; 478pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                               07-OCT-2002; 2002US-0416661P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAY-2003; 2003US-00428275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-053040/05.
                                                                                                                                                                                                                                                                  09-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                      23-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                            30-SEP-2002;
                                                                                                                     30-MAY-2002;
                                                                                                                                                                                                      31-MAY-2002;
02-JUL-2002;
                                                                                                                                                             30-MAY-2002;
                                                                                                                                                                                                                                               09-AUG-2002;
                                                                                                    30-MAY-2002;
                                                                                                                                                                                                                                                                                                          09-AUG-2002;
                                                                                                                                                                                                                                                                                                                           22-AUG-2002;
                                                                                 29-MAY-2002;
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The present invention relates to antisense compounds targeted to a nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of beta-site APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-comprises at least one modified nucleobase, preferably a 5'-0-comprises at least one modified nucleobase, preferably a 5'-0-comprises at least one shippincolocides are useful for the reatment of diseases such as hyperproliferative disorders, e.g. cancer, and neurodegenerative disorders such as Alzheimer's disease. The present sequence represents an antisense oligonucleotide used in the examples of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating a disease or condition, e.g. cancer, Alzheimer's disease or
                                                                                                                                                                                                                                                                                                                                                                      "tdd base= OTHER /mcd base a phosphorothioate /mcd base= "This oligonucleotide has a phosphorothioate backbone and 2'-methyoxyethyl (2'-MCB) wings at the 5' and 3' ends, which are 5 nucleotides in length at each end. All cytidine residues are 5-methylcytidines"
                                                                                                                                                Human beta-site APP-cleaving enzyme 2, antisense oligonucleotide #10.
                                                                                                                                                                                  Antisense therapy, human; beta-site APP-cleaving enzyme 2; hyperproliferative disorder; cancer, neurodegenerative disorder; Alzheimer's disease; cytostatic; neuroprotective; nootropic; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 20; 59pp; English
                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-JUN-2002; 2002US-00163272.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-JUN-2002; 2002US-00163272
                                     ADH45076 standard; DNA; 20
                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                            ′*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-022081/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003224517-A1.
                                                                                                                                                                                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                              25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dobie KW;
                                                                           ADH45076;
RESULT 299
                     ADH45076,
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Gaps

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16; Conservative

Matches

Query Match Best Local Similarity

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ADI28116;

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The present invention relates to antisense compounds targeted to a nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of beta-site APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2-0-comprises at least one modified nucleobase, preferably a 5-0-comprises at least one modified nucleobase, preferably a 5-comprises at least one modified nucleobase, preferably a 5-comprise methylcytosine. The antisense oligonucleotides are useful for the creatment of diseases such as hyperproliferative disorders, e.g. cancer, and neurodegenerative disorders such as Alzheimer's disease. The present sequence for an antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New compounds, particularly antisense oligonucleotides targeted to a mucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating a disease or condition, e.g. cancer, Alzheimer's disease or neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                Antisense therapy, human; beta-site APP-cleaving enzyme 2; hyperproliferative disorder; cancer; neurodegenerative disorder; Alzheimer's disease; cytostatic; neuroprotective; nootropic; ds.
                                                                                                                                                                                                                                                                          Human beta-site APP-cleaving enzyme 2 DNA target sequence #9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.4; DB 1; Length 20;
44.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 97; 59pp; English.
510 CTACCTGGAGAGCTGA 526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 510 CTACCTGGAGAAGCTGA 526
                                                                                                                                                ADH45153 standard; DNA; 20 BP
                        CTACCTGGAGATGCTGA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-JUN-2002; 2002US-00163272.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-JUN-2002; 2002US-00163272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94.18;
                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 94.1
les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-022081/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003224517-A1.
                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                  25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-DEC-2003
                                                                                                                                                                                        ADH45153;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dobie KW;
                                        18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                      RESULT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                          ADH45153
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The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding protein tyrosine phosphatase type 1VA member 3 (PRL-3), that specifically hybridises with the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluent, inhibiting the expression of PRL-3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with PRL-3 and screening for an antisense compound. The antisense oligonucleotide is useful for preparing a composition for treating hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotide, comprising a sequence targeted to a nuclaic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL -3), useful for preparing a composition for treating hyperproliferative disorders, e.g., cancer.
                                                                                                                                                                                                                                                                  /mod_base= OTHER
/note= "Phosphorothioate backbone and all cytidines are
-methyl cytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disorder, particularly cancer ((e.g. colorectal cancer), diabetes, reduced glucose tolerance, insulin resistance and obesity. The present sequence is an antisense oligonucleotide targeting human PRL3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                               protein tyrosine phosphatase type IVA member 3, colorectal cancer; diabetes; glucose tolerance; insulin resistance; obesity; hyperproliferative disorder; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                Antisense oligonucleotide targeting human PRL3 ISIS 217398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.9%; Score 15.4; DB 1; Length 20;
94.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
/mote= "2'-methoxyethyl residues"
16.20
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                     'note= "2'-methoxyethyl residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                 Human; antisense gene therapy; ss; PRL3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 23; 77pp; English.
                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        857 AGGACCTGAAGCAGTAC 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-JUN-2002; 2002US-00177554.
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/*tag= b
                               22-APR-2004 (first entry)
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Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-070585/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dobie KW, Zhang H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003235911-A1
                                                                                                                                                                                                                   Key
modified_base
                                                                                                                                                                                                                                                                                                                   modified_base
                                                                                                                                                                                                                                                                                                                                                                                    modified base
                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-DEC-2003
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Gaps

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19

CTACCTGGAGATGCTGA

ADI28116 standard; DNA; 20 BP

RESULT 301 ADIZBI16/c ID ADIZE XX

ADI28258;

RESULT 302 AD128258

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The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding MARK3 (MAP) microtubule affinity-regulating kinase 3), that specifically of MARK3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or dilumer, inhibiting the expression of MARK3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with MARK3 and screening for an antisense compound. The antisense oligonucleotide is useful for preparing a composition for treating hyperproliferative diseases. Partier and neurodegenerative diseases e.g. Alzheimer's diseases. The present sequence is a MARK3 cDNA target region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound targeted to a nucleic acid molecule encoding microtubule-affinity-regulating kinases (MARK3), useful for modulating expression of MARK3 or for treating cancer or Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense oligonucleotide targeting human MARK3 ISIS 151469.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; antisense gene therapy; ss; MARK3;
MAP/microtubule affinity-regulating kinase 3; cancer;
Alzheimer's disease; neurodegenerative disorde;
hyperproliferative disorder; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                Human; antisense gene therapy; ss; MARK3;
MAP/microctubule affinity-regulating kinase 3; c
Alzheimer; disease; neurodegenerative disorde;
hyperproliferative disorder; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; SEQ ID NO 90; 233pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1. .20
/*tag= b
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             971 TACACCGAGACCTCAAG 987
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                                                                                                                                                                                                                                                                     17-JUN-2002; 2002US-00174319.
                                                                                                                                                                                                                                                                                                             L7-JUN-2002; 2002US-00174319
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Les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 TACATCGAGACCTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADI29100 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                        Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-052188/05
                                                                                                                                                                               US2003232771-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
modified_base
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                                                                                                                                     Homo sapiens
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                                                                                                                                                                                                                         18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                      Ward DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADI29100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL-3), that specifically hybridises with the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluent, inhibiting the expression of PRL-3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with PRL-3 and screening for an antisense compound. The antisense oligonucleotide is useful for preparing a composition for treating hyperproliferative disorder, particularly cancer (Gog. colorectal cancer), diabetes, reduced glucose tolerance, insulin resistance and obesity. The present sequence is a Human PRL3 cDNA AO target region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotide, comprising a sequence targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL -3), useful for preparing a composition for treating hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                            Human; antisense gene therapy; ss; PRL3;
protein tyrosine phosphatase type IVA member 3; colorectal cancer;
diabetes; glucose tolerance; insulin resistance; obesity;
hyperproliferative disorder; cytostatic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 16; SEQ ID NO 165; 77pp; English
                                                                                                                                                                                                         Human PRL3 antisense target region #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human MARK3 cDNA target region #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       857 AGGACCTGAAGCAGTAC 873
                                                                      ADI28258 standard; cDNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGACCTGAAGAAGTAC 18
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Best Local Similarity 94.1%;
Matches 16; Conservative
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                                                                                                                                                              22-APR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disorders, e.g., cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-070585/07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zhang H;
                                                                                                                                                                                                                                                                                                                                                                                                             US2003235911-A1
                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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ADI29170;

XX ADI29170
XX ADI2
XX ADI2
XX ADI2

RESULT 303

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Gaps

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The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding MARK3 (MAP/microtubule affinity-regulating kinase 3). that specifically hybridises with the nucleic acid encoding MARK3 and inhibits expression of MARK3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluter, inhibiting the expression of MARK3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with MARK3 and screening for an antisense compound. The antisense oligonucleotide is useful for preparing a composition for treating hyperproliferative disorder, particularly cancer and neurodegenerative diseases e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ss; antisense gene therapy; protein phosphatase 2A A subunit;
PPP2R1A; serine/threonine phosphatase; cancer; neurodegenerative disease;
vial infection; parasitic infection; apoptotic disorder;
/note= "Phosphorothioate backbone and all cytidines are-methyl cytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encoding microtubule-affinity-regulating kinases (MARK3), useful for modulating expression of MARK3 or for treating cancer or Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%; Score 15.4; DB 1; Length 20;
14.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PPP2R1A antisense oligonucleotide ISIS155015
                                                                                                                             /*tag= c
/mod_base= OTHER
/note= "2'-methoxyethyl residues"
                                                                           /mod_base= OTHER
/note= "2'-methoxyethyl residues"
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 20; 233pp; English
                                                                                                                                                                                                                                                                                                                                                             Dobie KW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              971 TACACCGAGACCTCAAG 987
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                                                                                                                                                                                                                                                             17-JUN-2002; 2002US-00174319.
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Best Local Similarity 94.1
Matches 16; Conservative
                                                               *tag=
                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                             Ward DT, Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-052188/05
                                                                                                                                                                                              US2003232771-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               targeting MARK3
                                            modified base
                                                                                                          modified_base
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                                                                                                                                                                                                                             L8-DEC-2003
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Gaps . 0

Homo sapiens

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The invention relates to a compound 8-80 mucleobases in length targeted to, and which specifically hybridises with a nucleic acid molecule encoding PPPRARA (protein phosphatase 2A A subunit), and inhibits the expression of PPPRARA (protein phosphatase 2A A subunit), and inhibits the expression of PPPRARA, i.e. is an antisense oligonucleotide (AS). Also included are a compound 8-80 nucleobases in length that specifically by hybridises with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding PPPRARA, a composition comprising the compound and a carrier or diluent, inhibiting the expression of PPPRARA in compound and a carrier or diluent, inhibiting the expression of PPPRARA is inhibited), treating an animal having a disease or condition associated with PPPRARA (by administering to the expression of PPPRARA is inhibited), treating an antisense compound (comprising to prophylactic amount of the compound so that a compression of PPPRARA with one or more candidate antisense compounds that inhibit the expression of a nucleic acid encoding compound, composition and methods are useful for treating a disease or condition associated with PPPRARA, such as a neurodegenerative disorder, a hyperproliferative disorder, as uncleased or condition arising from aberrant apoptosis, viral or parasitic infection. They are also useful in research and diagnostics for modulating the compound of an encoding in services or condition arising the encoding is an encoding the component of an antisense compound of an arising the encoding condition arising from a person and secondate or an encoding condition arising from a person and secondates. A such as a neurodegenerative condition arising from a person and secondates or condition arising from a person and secondates. A such as a neurodegenerative condition arising from a person and secondates. A such as a neurodegenerative condition arising from a person and secondates or condition arising from a person and secondates.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding PPP2R1A, useful for treating a neurodegenerative or hyperproliferative disorder e.g. cancer, or diseases arising from
                                                                  /mod_base= OTHER
/note= "Phosphorothioate backbone and all cytidines are
-methyl-cytidine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPP2R1A. The present sequence is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oligonucleotide for human PPP2R1A of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                           /mod_base= OTHER
/note= "2'-methoxyethyl residue
16. .20
                                                                                                                                                                                                                                                                                                 /note= "2'-methoxyethyl residue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 27; 70pp; English.
Location/Qualifiers
                                                                OTHER
                                                                                                                                                                                                                                                  /*tag= c
/mod base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JUL-2002; 2002US-00210589
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                                          *tag= b
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Best Local Similarity 94.1°
Matches 16, Conservative
                                                                                                                                                     *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-142662/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aberrant apoptosis.
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Key modified_base
                                                                                                                                  modified base
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ADN9781

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/note= "sugar phosphate internucleotide linkages in the
backbone are replaced with a phosphorothioate
                                                                                                                                                                                  /mod_base= OTHER
/note= "nucleotides are 2'-methoxyethyl-nucleotides"
16. .20
/*tag= d
/mod_base= OTHER
/note= "nucleotides are 2'-methoxyethyl-nucleotides"
                                                                                                                            /mod_base= OTHER
/note= "all C are 5'-methylcytidines"
                                                                                 internucleotide linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                               Veniant-Ellison M,
            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                               25-SEP-2003; 2003WO-US030352
                                                                                                                                                                                                                                                                                                                                                                           26-SEP-2002; 2002US-00260203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancer, or type 2 diabetes.
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                                                                                                   1. .20
/*tag= c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 94.1
les 16; Conservative
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/*tag=
                                          tag=
                                                                                                                                                                                                                                                                                                                                                                                                     (AMGE-) AMGEN INC.
(ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bhanot S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-330164/30
               Key
misc difference
                                                                                                                                                                                                                                                                                      WO2004031350-A2
                                                                                                                                                         modified_base
                                                                                                                                                                                                               modified base
                                                                                                 modified base
                                                                                                                                                                                                                                                                                                                  15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dobie KW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 308
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding forkhead box OlA, where the compound is at least 70% complementary to a nucleic acid molecule encoding forkhead box OlA and modulates expression of forkhead box OlA by at least 10%. The compound is useful for treating an animal having a disease or condition associated with forkhead box OlA, e.g. a hyperproliferative disorder (cancer, preferably rhabdomyosarcoma), or type 2 diabetes. This sequence corresponds to a targeted sequence from the human foxhead box
                                                                                                                                          ss; cytostatic; antidiabetic; foxhead box OIA inhibitor; forkhead box OIA; hyperproliferative disorder; cancer; rhabdomyosarcoma; diabetes; H-ras gene; antisense; gene expression; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                  targeted to for for treating
                                                                                                                                                                                                                                                                                                                                                                                          Shutter JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.4; DB 1; Length 20;
34.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                  New compounds, particularly antisense oligonucleotides, nucleic acid molecule encoding forkhead box 01A, useful
                                                                                                                                                                                                                                                                                                                                                                                          Lindberg RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                Human foxhead box O1A gene target sequence #4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 18; SEQ ID NO 101; 146pp; English.
                                                                                                                                                                                                                                                                                                                                                                                         Veniant-Ellison M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1381 GCCGACCTCCTCACCAA 1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
                            BP.
                                                                                                                                                                                                                                                                                       25-SEP-2003; 2003WO-US030352
                                                                                                                                                                                                                                                                                                                    26-SEP-2002; 2002US-00260203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer, or type 2 diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCGACCTCATCACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                            ADN97811 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                    (first entry)
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Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADN97731 standard; DNA;
                                                                                                                                                                                                                                                                                                                                               (AMGE-) AMGEN INC.
(ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW, Bhanot S,
                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-330164/30
                                                                                                                                                                                                                                WO2004031350-A2
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                                                                                     01-JUL-2004
                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                            15-APR-2004.
                                                       ADN97811;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADN97731;
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RESULT 306
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Shutter JR;

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                                                                                                                                                                                                                                                                                             The invention relates to a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding forkhead box OIA, where the compound is at least 70% complementary to a nucleic acid molecule encoding forkhead box OIA and modulates expression of forkhead box OIA by at least 10%. The compound is useful for treating an animal having a disease or condition associated with forkhead box OIA, e.g. a hyperproliferative disorder (cancer, preferably rhabdomyosarcoma), or type 2 diabetes. This sequence corresponds to an oligonucleotide targeted to the human foxhead box OIA genes in order to inhibit gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Farnesoid X receptor gene expression antisense inhibitory oligo #2097.
                                                                                                                        targeted to a for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
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14.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                        New compounds, particularly antisense oligonucleotides, nucleic acid molecule encoding forkhead box 01A, useful
Lindberg RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 3 A; 2 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                 Claim 14; SEQ ID NO 21; 146pp; English.
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ss; cytostatic; antidiabetic; foxhead box OIA inhibitor; forkhead box OIA; hyperproliferative disorder; cancer; rhabdomyosarcoma; diabetes; H-ras gene; antisense; gene expression; primer.

Synthetic

Human foxhead box OlA sequence inhibitory oligo #4.

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                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. dyslipidemia and its symptoms, atheroselerosis, low HDL (high density lipoprotein) elevated LDL (low density lipoprotein) or hypertholesterolemia, gallstones, hypertriglyceridemia, obesity. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence corresponds to an antisense oligonucleotide of the
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            neuroprotective, vasotropic, antisense; gene therapy;
Farnesoid X receptor; diabetes; immunological disorder;
cardiovascular disorder; dyslipidemia; atherosclerosis;
high density lipoprotein; low density lipoprotein; hypercholesterolemia;
gallstones; hypertriglyceridemia; obesity; neurological disorder;
ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides useful for modulating expression of farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders, galistones or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetes; immunological disorder; cardiovascular disorder; dyslipidemia, atherosclerosis; high density lipoprotein; low density lipoprotein; hypercholesterolemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Farnesoid X receptor gene expression antisense inhibitory oligo #1835.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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0
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14.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
 antiarteriosclerotic; hepatotropic; litholytic; anorectic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; SEQ ID NO 2097; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1675
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                                                                                                                                                                                       25-SEP-2003; 2003WO-US030353,
                                                                                                                                                                                                                 25-SEP-2002; 2002US-0413588P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1659 CACCCTCACAGGGCAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADO54462 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                           (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                              WPI; 2004-347928/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                  WO2004030750-A1
                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-JUL-2004
                                                                                                                                                            15-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention.
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                                                                                                                                                                                                                                                                     Kane CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such dyslipidemia and its symptoms, atheroscierosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hypertiiglyceridemia, obesity, neueurological disorders, or ischemia/reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or whits. This sequence corresponds to an antisense oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders, gallstones or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; PIM-1; ss; antisense oligonucleotide; phosphorothioate linkage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
gallstones; hypertriglyceridemia; obesity; neurological disorder;
ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%; Score 15.4; DB 1; Length 20;
4.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
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hyperproliferative disorder; cancer; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; SEQ ID NO 1835; 150pp; English.
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                                                                                                                                                                                                                                                                                                                      25-SEP-2003; 2003WO-US030353.
                                                                                                                                                                                                                                                                                                                                                                                         25-SEP-2002; 2002US-0413588P.
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Best Local Similarity 94.1%;
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-347928/32.
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                                                                                                                                                                            WO2004030750-A1
                                                                                                        Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kane CD;
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11-NOV-2002; 2002US-00292849

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Gaps

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compound that modulates PIM-1 expression, useful in treating an nal having a disease or condition, i.e. hyperproliferative disorder.
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                         WPI; 2004-374981/35
                                                                                                                                                                                                            US2004092463-A1
                                                                                                                                                                                                                                  11-NOV-2002;
                                                                                                                                                                                                    Homo sapiens
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                                                                                                                                                              ADN03063;
                                                                                                                                                                                                                                                 Watt AT;
                                                                                                                                                                                                                                                                     animal
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The invention relates to a compound targeted to a nucleic acid molecule encoding the human PIM-1 polypeptide. The compound is an antisense obligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably as 2'-0-methoxyethyl sugar moiet, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of the human PIM-1 polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence repersents a human PIM-1 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, forkhead box OlA; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; rhabdomyosarcoma; type 2 diabetes; cytostatic; antidiabetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New compounds, particularly antisense oligonucleotides, targeted to a
nucleic acid molecule encoding forkhead box OIA, useful for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human forkhead box OlA DNA antisense oligonucleotide target region
                                                                                                                                                                                                                                                                                                                                      0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; ve 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    249 TGACCCTGGAGAGGCCC 265
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer, or type 2 diabetes.
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LINDBERG R A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 94.1
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SHUTTER J R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-389194/36.
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(Ω
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-AUG-2004
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                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SHUT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (VENI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (LIND/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BHAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 312
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                 phosphorothicate linkage, at least one modified sugar molety, preferably a 2'-O-methoxyethyl sugar molety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of the human PIM-1 polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence represents a human PIM-1 DNA antisense
                                                                                                                                                                                                                                                                                                                        The invention relates to a compound targeted to a nucleic acid molecule encoding the human PIM-1 polypeptide. The compound is an antisense oligonoucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e.
                                                                                                                                                                                                                   New compound that modulates PIM-1 expression, useful in treating an animal having a disease or condition, i.e. hyperproliferative disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; PIM-1; ss; antisense oligonucleotide; phosphorothioate linkage;
2'-0-methoxyethyl sugar moiety; 5-methylcytosine;
hyperproliferative disorder; cancer; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.4; DB 1; Length 20;
34.1%; Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human PIM-1 DNA antisense oligonucleotide #20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 102; 51pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   249 TGACCCTGGAGAGGCCC 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADN03063 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 rgarccredadaddccc 18
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                                       11-NOV-2002; 2002US-00292849.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.9°
Best Local Similarity 94.1°
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC
                                                                                  (ISIS-) ISIS PHARM INC
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#4

The invention relates to a compound targeted to a nucleic acid molecule encoding the human forkhead box OlA polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage is. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are

Shutter JR;

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Gaps

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The invention relates to a compound targeted to a nucleic acid molecule encoding the human forkhead box OlA polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of the human forkhead box OlA hyperproliferative disorders, e.g. cancer, preferably rhabdomyosarcoma, and type 2 diabetes. This sequence represents an antisense control of coligonucleotide targeted to DNA encoding the human forkhead OlA 25-SEP-2003; 2003US-00671074. 26-SEP-2002; 2002US-00260203. cancer, or type 2 diabetes. ADN40667 standard; DNA; 20 (first entry) (BHAN/) BHANOT S. (VENI/) VENIANT-ELLLISON M. (LIND/) LINDBERG R A. (SHUT/) SHUTTER J R. Dobie KW, Bhanot S, WPI; 2004-389194/36. (DOBI/) DOBIE K W. JS2004097459-A1. Homo sapiens 12-AUG-2004 20-MAY-2004. ADN40667; RESULT 313 ADN40667/ 88888888 g

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0.9%; Score 15.4; DB 1; Length 20;
94.1%; Pred. No. 5.3e+02;
Ive 0; Mismatches 1; Indels
        Sequence 20 BP; 3 A; 2 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                       1381 GCCGACCTCCTCACCAA 1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-DEC-2002; 2002US-00316755.
                                                                                                                                                                                                          17 GCCGACCTCATCACCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-DEC-2002; 2002US-00316755.
                                                                                   94.18;
                                                                                                                                                                                                                                                                                                                                                                   ADP27305 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-440341/41.
                                                 Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004110152-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                          ADP27305;
                                                                                                                                                                                                                                                                                                            RESULT 314
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phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety;
5-methylcytosine; hyperproliferative disorder; cancer; rhabdomyosarcoma;
                          polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer, preferably rhabdomyosarcoma, and type 2 diabetes. This sequence represents a human forkhead OIA DNA antisense oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New compounds, particularly antisense oligonucleotides, targeted to a
nucleic acid molecule encoding forkhead box OlA, useful for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shutter JR;
useful for modulating the expression of the human forkhead box OIA
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                                                                                                                                                                                                                Query Match 0.9%; Score 15.4; DB 1; Length 20; Best Local Similarity 94.1%; Pred. No. 5.3e+02; Matches 16; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human forkhead box OIA DNA antisense oligonucleotide #4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Veniant-Ellison M, Lindberg RA,
                                                                                                                                                               Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       type 2 diabetes; cytostatic; antidiabetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 14; SEQ ID NO 21; 80pp; English
                                                                                                                                                                                                                                                                                                                              1381 GCCGACCTCCTCACCAA 1397
                                                                                                                                                                                                                                                                                                                                                                                  4 GCCGACCTCATCACCAA 20
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                                                                                                                                        Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence represents a rat MMP11 DNA antisense oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New oligonucleotide compound that inhibits expression of matrix metalloproteinase 11, useful for preparing a composition for treating hyperproliferative disorder, e.g., cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2.0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of the MMPII polypeptide and in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                        Rat MMP11 DNA antisense oligonucleotide target region #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 2 A; 9 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 16; SEQ ID NO 231; 76pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
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RESULT 315

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The invention relates to a compound targeted to a nucleic acid molecule encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of the MMP11 polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence represents an antisense oligonucleotide targeted to DNA encoding the rat MMP11 polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human beta-site APP-cleaving enzyme 2 DNA antisense oligonucleotide #10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; beta-site APP-cleaving enzyme 2; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; sporadic inclusion-body myositis; cancer; cytostatic.
                                                                                                                                             Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New oligonucleotide compound that inhibits expression of matrix metalloproteinase 11, useful for preparing a composition for treating hyperproliferative disorder, e.g., cancer.
                                                                                                             Rat matrix metalloproteinase 11 DNA antisense oligonucleotide #5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; iive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 1 A; 8 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 16; SEQ ID NO 100; 76pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADQ08032 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                                                                                                                                                   10-DEC-2002; 2002US-00316755
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ADP27174 standard; DNA; 20
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                                                                         (first entry)
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hes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-440341/41.
                                                                                                                                                                                                                              Rattus norvegicus
                                                                                                                                                                                                                                                                  US2004110152-A1
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                                                                       26-AUG-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Baker BF,
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                                   ADP27174
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Matches
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AC ADQ0
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XX Fm Good
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encoding the human beta-site APP-cleaving enzyme 2 polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified nucleobase comprising a 5-methylcytosine. The antisense nucleobase comprising a 5-methylcytosine. The antisense APP-cleaving enzyme 2 polypeptide and for treating diseases associated with expression of beta-site APP-cleaving enzyme 2 such as sporciated with expression of seases associated with expression of seases associated with expression of seases associated and seases as special displayed the sease as special displayed and seases as special displayed and sease as sease as sease as sease as sease as a sease as a sease as sease as sease as a sease
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound, useful for treating diseases associated with expression of beta-site amyloid precursor protein (APP)-cleaving enzyme 2 such as sporadic inclusion-body myositis and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                inclusion-body myositis and cancer. This sequence represents an antisense oligonuclectide targeted to DNA encoding the human beta-site APP-cleaving enzyme 2 polypeptide of the invention.
                                                                                                   /mod_base= OTHER
/note= "OTHER= Phosphorothioate backbone. All cytidines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a compound targeted to a nucleic acid molecule
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                                                                                                                                                                                                                                                                                                                  /*tag= c
/mod_base= OTHER
/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                           "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                       are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 19; SEQ ID NO 20; 61pp; English.
                   Location/Qualifiers
                                                                                                                                                                                                                                  mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         526
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-SEP-2003; 2003US-00663452.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-JUN-2002; 2002US-00163272.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         510 CTACCTGGAGAAGCTGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTACCTGGAGATGCTGA
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                                                                                                                                                                                                            *tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16; Conservative
                                                                                                                                                                                                                                                                                      15. .20
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*tag=
                                                                                                                                                                                                                                                                'note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                           US2004132681-A1,
                        Key
modified_base
                                                                                                                                                                                                                                                                                         modified base
                                                                                                                                                                                   modified base
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Gaps

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encoding the human beta-site APP-cleaving enzyme 2 polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably 2 2'-o-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of the human beta-site APP-cleaving enzyme 2 polypeptide and for treating diseases associated with expression of beta-site APP-cleaving enzyme 2 such as sporadic inclusion-body myositis and cancer. This sequence represents a human beta-site APP-cleaving enzyme 2 bNA antisense oligonucleotide target region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound, useful for treating diseases associated with expression of beta-site amyloid precursor protein (APP)-cleaving enzyme 2 such as sporadic inclusion-body myositis and cancer.
                                                                                                                                             /note= "OTHER= Phosphorothioate backbone. All cytidines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a compound targeted to a nucleic acid molecule
phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; sporadic inclusion-body myositis; cancer; cytostatic.
                                                                                                                                                                                                                       /mod_base= OTHER
/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
15. .20
                                                                                                                                                                                                                                                                                                          /note= "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.4; DB 1; Length 20;
94.1%; Pred. No. 5.3e+02;
ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 97; 61pp; English.
                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                            /*tag= c
/mod base= OTHER
                                                                                                                                      /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                              04-JUN-2002; 2002US-00163272.
                                                                                                                                                                                                                                                                                                                                                                                                             16-SEP-2003; 2003US-00663452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                510 CTACCTGGAGAAGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV13323 standard; DNA; 21
                                                                                                                                                                                                         *tag= a
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*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                           US2004132681-A1
                                                                                    Key
modified_base
                                                                                                                                                                                       modified base
                                                                                                                                                                                                                                                          modified base
                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                           08-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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(first entry)

14-MAY-1998

AAV13323;

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Classifying patients with inflammatory disease, specifically asthma -according to polymorphisms in 5-lipoxygenase gene regulatory region, e.g. to identify candidates for lipoxygenase inhibitor treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence was used in the development of a novel method for classifying patients suffering from an inflammatory disease. The method comprises identifying in DNA from at least 1 patient a sequence polymorphism, as compared with the normal 5-lipoxygenase (5-DCX) gene (AAT88431), in a 5-LOX regalatory gene sequence. The method can be applied to subjects with asthma, ulcerative colitis, bronchitis, sinusitis, postriasis, allergic and non-allergic thinitis, lupus or rheumatoid arthritis. Specifically it can be used to diagnose asthma or susceptibility to disease, identify treatments suitable for individual patients or assess the likely success of treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Haematopoietic stem cell growth factor; SCGF; burst-promoting activity; BPA; granulocyte macrophage colony stimulating activity; gene therapy; GPA; haematopoietic cell disorder; bone marrow inhibition; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                            Inflammatory disease; polymorphism; 5-lipoxygenase; asthma; ulcerative colitis; bronchitis; sinusitis; psoriasis; rhinitis; arthritis; diagnosis; treatment; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.9%; Score 15.4; DB 1; Length 21; 94.1%; Pred. No. 5.6e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Primer for Human haematopoietic stem cell growth factor.
                                                                                                                                                                                                                                                                                                                                                  Grobholz J;
               Sense primer Exon 5 for human 5-lipoxygenase gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seguence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                  In K, Asano K, Beier D,
                                                                                                                                                                                                                                                                                                                (BGHM ) BRIGHAM & WOMENS HOSPITAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 19; 56pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    992 AGAACCTGCTCATCAAC 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
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                                                                                                                                                                                                                                 97WO-US007137.
                                                                                                                                                                                                                                                                   96US-0016890P
                                                                                                                                                                                                                                                                                 97US-00846020
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 94.1
Les 16; Conservative
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                                                                                                                                                                                                                                                                  06-MAY-1996;
                                                                                                                                                                                                                                 29-APR-1997;
                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                W09742347-A2
                                                                                                                                                                                                                                                                                 25-APR-1997;
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                                                                                                                                                                                                13-NOV-1997.
                                                                                                                                                                                                                                                                                                                                                 Drazen JM,
                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV20817;
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Matches
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16-AUG-2000; 2000US-0225724P
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                                                                                                                                                                                                      This sequence is a primer for DNA encoding the human haematopoietic stem cell growth factor (SCGF) of the invention. The polypeptide of the invention is of mammalian origin and has haematopoietic stem cell growth factor SCGF activity, including burst-promoting activity (BPA) and granulocyte macrophage colony stimulating activity (GPA). The products can be used for treatment, diagnosis and analysis of haematopoietic cell disorders and bone marrow inhibition, e.g. by cytotoxic anticancer agents such as 5-fluorouracil. The products can also be used for amplification of haematopoietic cells in vitro, e.g. for use in marrow grafting and gene therapy by insertion of SCGF gene using a suitable therapeutic
                                                                                                                                           Haematopoietic stem cell growth factor – useful for, e.g. treatment and diagnosis of haematopoietic cell abnormalities and bone marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                             .,
                                                                                                                                                                                                                                                                                                                                                       Length 21;
                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                       Score 15.4; DB 1;
Pred. No. 5.6e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human gene single nucleotide polymorphism #2172.
                                                                                                                                                                                     Example 21; Page 49; 85pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                 630
                                                                                                      Sugimura A, Mio H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          replace (11, A)
                     97WO-JP002985.
                                         96JP-00262252
                                                 97JP-00087242.
97WO-JP002349.
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                                                                                 (KYOW ) KYOWA HAKKO KOGYO KK
                                                                                                                                                                                                                                                                                                                                                       Match 0.9%;
Local Similarity 94.1%;
les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                 614 CCTACATTAAGCTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                      CCTGCATTAAGCTGGAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-JUN-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag=
                                                                                                                        WPI; 1998-179383/16.
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                    27-AUG-1997;
                                         27-AUG-1996;
                                                             07-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                   24-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-MAR-2001
 05-MAR-1998
                                                                                                      Hiraoka A,
                                                                                                                                                                   inhibition,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF97411;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Variation
                                                                                                                                                                                                                                                                                                                                                                                                                     13
                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                 vector
                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 320
                                                                                                                                                                                                                                                                                                                                                                            Matches
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The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin I and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also correlations to diseases. The present sequence is an example of one of the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New pO157 plasmid-specified polypeptide found in Escherichia coli and other enterohemorrhagic Escherichia coli, that binds to and cleaves Clesterase inhibitor, useful for diagnosing and treating colitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cl-esterase inhibitor; enterchaemorrhagic pathogen; antiinflammatory; colitis; antibacterial; antidiarrhoeic; PCR; primer; ss.
                                                                                        Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Escherichia coli p0157 plasmid DNA amplifying PCR primer, stcE3'1773.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                             Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
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14.1%; Pred. No. 5.6e+02;
ve 0; Mismatches 1; Indels
                                                                                        Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 6 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                     Lander ES, Gargill M, Ireland JS, Bolk S,
(WHED ) WHITEHEAD INST BIOMEDICAL RES. (MILL-) MILLENNIUM PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (WISC ) WISCONSIN ALUMNI RES FOUND.
                                                                                                                                                                                                                                                                                                                                                              Example; Page 197; 242pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ilarity 94.1%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGAACGTGAAGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 715 CTGGAACATGAAGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAD38761 standard; DNA; 21
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                                                                                                                                                 WPI; 2001-226749/23
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nes 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Escherichia coli.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAD38761;
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1226 AGGAACAGCTACACTTC 1242

2 AGCCACAGCTACACTTC 18

P

BP

ADE36722 standard; DNA; 23

RESULT 323

(first entry)

29-JAN-2004

ADE36722;

10017621-381.rng

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                        The present invention relates to novel pOI57 plasmid-specified proteins found in Escherichia coll EDI933 and other enterchaemorrhagic B. coli, designated StcB, that bind to and cleave Cl-esterase inhibitor. Sequences of the invention are useful for diagnosing, preventing or treating hamolytic uraemic syndrome or colitis in a subject infected with an enterchaemorrhagic pathogen expressing inhibitor protein. They are useful for testing a molecule for the ability to reduce proteolysis of Cl for testing a molecule for the ability to reduce proteolysis of Cl primer which is used for amplifying B. coli poli7y plasmid DNA encoding StCE protein. This primer is used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Process to detect high concentrations of virus in blood plasma or serum, by restricting the sensitivity of PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Detection, viral concentration; blood plasma; serum; PCR sensitivity, extraction; amplification; detection; PCR primer; ss.
                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                   0.9%; Score 15.4; DB 1; Length 21;
94.1%; Pred. No. 5.6e+02;
ive 0; Mismatches 1; Indels
                                                                                                                                                                                       Seguence 21 BP; 5 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
Example; Page 24; 58pp; English.
                                                                                                                                                                                                                                                                             1220 CGGTGGAGGAACAGCTA 1236
                                                                                                                                                                                                                                                                                                                                                                                   ВР
                                                                                                                                                                                                                                                                                                        ceerceaecaacecra 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98EP-00120799.
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                                                                                                                                                                                                                                94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Parvovirus B19 PCR primer 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CENT-) CENTEON PHARMA GMBH.
                                                                                                                                                                                                                                                                                                                                                                                AAX57349 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                               Local Similarity 94.1
es 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Groener A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-329400/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                          22-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EP922771-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Parvovirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Weimer T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                             AAX57349;
                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                   RESULT 322
                                                                                                                                                                                                                                                                                                                                                                  AAX57349
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(ZENS-) ZENSUN SHANGHAI SCI TECH LID

WPI; 2003-876924/81.

Zhou M;

26-MAR-2003; 2003WO-CN000217 26-MAR-2002; 2002CN-00116259

WO2003080835-A1 Homo sapiens.

02-OCT-2003

neoplasm; ErbB-3; immune response; cytostatic; gene therapy; cancer; DE3-1 plasmid construction related oligonucleotide SEQ ID NO:11.

human; ss Synthetic.

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The present invention describes a method for treating, preventing or delaying neoplasm in a mammal. The method comprises administering an BrbB - 3 protein, a nucleic acid encoding an ErbB-3 protein, or their c functional fragments, where an immune response is generated against the neoplasm. ErbB-3 has cytostatic activity, and can be used in gene cherapy. The method is useful for treating, preventing or delaying or neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder, bone, brain, breast, buccal, central nervous system, cervix, colon, ear, confometrium, ososphagus, eye, eyelids, fallopian tube, gastrointestinal tract, head and neck, heart, kidney, larymx, liver, lung, mandible, contact, head and neck, heart, kidney, larymx, nose, oral cavity, covary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland, crectum, retina, salivary glands, skin, small intestine, spinal cord, stomach, testee, thyroid, tonail, uterha, uterus, vagina, cetomach, prostate, colon and lung cancer). The present sequence crepresents an oligonucleotide used in the construction of a plasmid cord, comprising ErbB-3, which is used in an example from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Use of an ErbB-3 protein, a nucleic acid encoding an ErbB-3 protein or their fragments, for treating, preventing or delaying neoplasms (e.g. urethra, uterus, vagina or vulva neoplasm) or cancers (e.g. breast, ovary or colon cancer).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 15.4; DB 1; Length 23;
Pred. No. 6e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 23 BP; 7 A; 12 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example; SEQ ID NO 11; 68pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       229 AGTGGTGGTGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 Agredregregregreg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.9
Best Local Similarity 94.1
Matches 16; Conservative
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; 0

Gaps

0

0.9%; Score 15.4; DB 1; Length 23; 94.1%; Pred. No. 6e+02; tive 0; Mismatches 1; Indels

Best Local Similarity 94.1 Matches 16; Conservative

Query Match

Sequence 23 BP; 6 A; 10 C; 4 G; 3 T; 0 U; 0 Other;

equivalents

This invention describes a novel method for for detection of high viral concentrations in blood plasma or serum by restriction of PCR sensitivity through suboptimal nucleic acid extraction, amplification and detection conditions. The method described is used to detect high concentrations of Parvovirus in the blood plasma or serum of humans. The method detects Parvovirus DNA with a content in humans of greater than 106 to 107 genome

Example 1; Page 6; 8pp; German.

/*tag= a //note= "at least one (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently to a polyamide backbone"

location/Qualifiers

*tag=

Cowsert LM;

Ecker DJ,

Mirabelli CK,

Crooke ST,

94WO-US009039. 93US-00104438.

Page 178

10017621-381.rng

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New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
          peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
                       antiviral; diagnostic; ss.
                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                     WPI; 1995-090841/12.
                                                                                                                                                                                                           09-AUG-1994;
                                                                             misc_feature
                                                                                                                                                              WO9504748-A1
                                                                                                                                                                                                                                  09-AUG-1993;
                                                                                                                                                                                                                                                                                 Anderson KP,
                                                                                                                                                                                      16-FEB-1995
                                            Synthetic
                                                                     Key
New oligo-nucleotide inhibits cytomegalovirus replication - by binding to a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of CMV diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATI1971-84 are antisense oligonucleotides (ONS) against human cytomegalovirus (CMV) that displayed activities of at least 50 % of control (ISIS 2922 shown in AATI1961). It was found that up to 4 internal mismatches could be tolerated without loss of antiviral activity. Antisense ONS targeting CMV DNA or RNA coding for the IEI, IE2 or DNA polymerase proteins have been shown to be effective in therapy, prophylaxis and diagnosis of CMV infection. The ONS may be modified to reduce nuclease resistance and to increase their efficacy. Modifications include phosphorothioate backbones, alkyl and halogen substituted sugar moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
                                                                                                                           antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis; intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.2; DB 1; Length 20;
Pred: No. 5.8e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                           /*tag= a
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                       CMV antisense oligonucleotide (ISIS 5477).
                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 10; Col 17; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                               Draper K, Anderson K;
       93US-00009263
                                                                                                                                                                                                                                                                                                                 92US-00927506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%;
nilarity 85.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 17; Conserv
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RESULT 324
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New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5' untranslated region, intron/exon (I/E) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and to appillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary in specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which a first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand binds with the areal binds and are water soluble, which facilitates possess no significant charge and are water soluble, which facilitates cellular uptakes. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to ensymatic degradation by proteases. The present sequence targets CNV IE2 nuclear localisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15.2; DB 1; Length 20; 55.0%; Pred. No. 5.8e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Granule bound starch synthase primer #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        130 CGGATGAAGAAGATCAAACG 149
Claim 2; Page 44; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 CGCAAGAAGAAGAGCAAACG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 85.0%;
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX63365 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX63365;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               signal 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX63365/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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Gaps

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130 CGGATGAAGAAGATCAAACG 149

Matches

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20 cechaghaghaghaghage 1

AAT01675 standard; DNA; 20

RESULT 325

AAT01675,

Peptide nucleic acid targetting CMV IE2 nuc sig 2.

(first entry)

17-DEC-1995 AAT01675;

CXXXXXX

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Location/Qualifiers
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granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme; modulation; gene expression; transgenic plant; cleavage; canola plant; caffeine synthesis; coffee plant; nicotine production; tobacco; fruit ripening; flower pigmentation; lignin production; ss.
                                                                                                                                                                                                                     Skokut TA;
                                                                                                                                                                                                                                                                        Ribozyme which modulates plant gene expression - preferably modulates expression of DELTA-9 desaturase or granule bound starch synthase in
        Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;
                                                                                                                                                                                                                Mcswiggen JA, Merlo PAO, Guo L,
Merlo DJ;
                                                                                                                                              96WO-US011689,
                                                                                                                                                                 95US-0001135P.
                                                                                                                                                                                       (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                    Edington BE,
Folkerts O,
                                                                                                                                                                                                                                                   WPI; 1997-202224/18
                                                                                                                                                                                                 (DOWC ) DOWELANCO.
                                                                                                                                              12-JUL-1996;
                                                                                                     WO9710328-A2
                                                                                                                                                                 13-JUL-1995;
                                                                                                                         20-MAR-1997
                                                                      Synthetic.
                                                                                                                                                                                                                    Zwick MG,
                                                                                                                                                                                                                               Young SA,
                                                                                  Zea mays.
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Example 27; Page 51; 155pp; English. maize or canola.

The present invention describes an enzymatic nucleic acid molecule (I) with RNA cleaving activity, which modulates the expression of a plant gene. Also described is a gene comprising a cDNA sequence encoding maize Delta-9 desaturase. (I) can be used (modulate expression of a gene, preferably Delta-9 desaturase or a granule bound starch synthase (GBSS) gene, in a plant (preferably a maize or canola plant). (I) can be used to modulate caffeine synthesis in a coffee plant, nicotine production in a tobacco plant, flower pigmentation in a rose, petunia, chrysanthemum or marigold plant or lignin production in a tobacco, aspen, poplar or pine

Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Gaps ö Query Match 0.9%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.8e+02; Matches 17; Conservative 0; Mismatches 3; Indels

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g

AAX17949 standard; DNA; 20 AAX17949; RESULT 327

ВР

(first entry) 11-MAY-1999 Anti-CMV oligonucleotide #15103.

Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification; phosphorothioate; infection; retinitis; ss.

Synthetic.

Human herpesvirus 5.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This antisense oligonucleotide is targeted to a nucleic acid sequence in the IB (immediate early) 2 region of the cytomegalovirus (CMV) genome and is able to inhibit CMV replication. Optionally the oligonucleotide include at least one 2'-(2-methoxyethoxy) sugar modification or phosphorothioate internucleotide linkages. The oligonucleotides (AAX17861 are also used to inhibit CMV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis
                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                          'note= "contains phosphorothioate internucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02;
                                                                  *tag= b
note= "all C bases are 5'-methyl-cytosine'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                            b
"2'-methoxyethoxy sugar moieties"
                                                                                                                                                     /*tag= b
/note= "2'-methoxyethoxy sugar moieties"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                            ŝ
                                                                                                                                                                                                                                                                                                                                          Chapman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                            Kisner DL, Anderson KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 7; Page 32; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 CGCAAGAAGAAGAACG 1
                                                                                                                                                                                                                                                                                    97US-00838715
                                         linkages"
                                                                                                                                        14. .20
/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 85.0
les 17; Conservative
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*tag=
                                                      ...20
...20
*tag=
                                                                                                                            note=
                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                        WPI; 1998-568330/48.
modified base
                                                      modified base
                                                                                                 modified base
                                                                                                                                          modified base
                                                                                                                                                                                                W09845314-A1
                                                                                                                                                                                                                                                                                    09-APR-1997;
                                                                                                                                                                                                                              15-OCT-1998.
                                                                                                                                                                                                                                                                                                                                            Draper KG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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Anti-CMV oligonucleotide #5477. BP AAX17894 standard; DNA; 20 (first entry) 11-MAY-1999 AAX17894 RESULT 328 AAX17894/c

Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification; phosphorothioate; infection; retinitis; ss.

Human herpesvirus 5. Synthetic

WO9845314-A1.

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Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; Page 45; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-419113/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB; AAY14684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GENE-) GENENA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9934016-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-0CT-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 330
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                                                                                                                                                                                                                                                                                                                                                                  Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA polymerase of cytomegalovirus (CMV) and are able to inhibit CMV replication. Optionally the oligonucleotides include at least one 2'-(2-methoxyethoxy) sugar modification or phosphorothioate internucleotide minkages. The oligonucleotides are used to inhibit CMV infections (by in vivo or in viro contact with cells, tissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis
                                                                                                                                                                                                                                              New antisense oligonucleotides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Identifying and characterizing cells by comparing the pattern of gene
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85.0%; Pred. No. 5.8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                 Anderson KP, Chapman S;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                             Claim 7; Page 30; 99pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ18135 standard; DNA; 20 BP.
                                        98WO-US006895
                                                                                 97US-00838715
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981L-00126627
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17; Conservative
                                                                                                                                                                 Kisner DL,
                                                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-419113/35.
P-PSDB; AAY14670.
                                                                                                                                                                                                     WPI; 1998-568330/48.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-DEC-1998;
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16-OCT-1998;
                                        07-APR-1998;
                                                                                 09-APR-1997;
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                                                                                                                                                                 Draper KG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                primer; ss
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PART OF STANDARD STAN
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in a selected gene family; and (c) calculating a compartive index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is cransformed. They can be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for determining the cells capable of expressing an homeobox related desired containing cells capable of expressing an homeobox related desired containing cells capable of expressing an homeobox related desired containing the pattern of gene expression in a selected geneticmining the pattern of gene expression. The containing the pattern of genes, kinase genes, the protein phosphatase genes, page enzyments.
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15.0%; Pred. No. 5.8e+02;
ve 0; Mismatches 3; Indels
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expression in a selected gene family.
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                                                                                                     Claim 4; Page 44; 102pp; English
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98IL-00126627.
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Matches 17; Conservative
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell the pattern of expression of genes in a selected gene family; and (c) calculating a profifted formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is cransformed. They can also be used for determining the individual, e.g. a fetua. They can also be used for defect of a selected treatment on a test cell. They can also be used for oftaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AA217803-218342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, procession in the RT-PCR reactions of the pattern of genes, strong genes, procession in the protein phosphatase genes, p450 enzyme genes, steroid receptor
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1 crecaccercaccrcaagac 20 g

AAZ18163 standard; DNA; 20 BP RESULT 331 AAZ18163

(first entry) 11-OCT-1999 AAZ18163;

STK 21 gene specific primer.

Genetic proximity, gene expression, cell characterisation, homeobox gene, genetic defect, reverse transcriptase polymerase chain reaction, RT-PCR, kinase gene, protein phosphatase, P450; steroid receptor, cadherin, primer; ss.

Homo sapiens Synthetic.

WO9934016-A2

08-JUL-1999.

98WO-IL000625. 28-DEC-1998;

98IL-00126627. 97IL-00122793 29-DEC-1997; 16-OCT-1998;

GENE-) GENENA LTD.

Vider B;

WPI; 1999-419113/35. P-PSDB; AAY14698 Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.

Claim 4; Page 45; 102pp; English.

The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell

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dely (b) determining in the first celling the second cell; (b) determining in the first celling the second cell; (b) determining in the first celling the second cell; (b) determining in the first celling and (c) calculating a conversion of genes in a selected gene family; and (c) calculating a conversion of a specified formula. The methods can be used for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is can individual, e.g. a fetus. They can be used for determining the origin of a selected treatment on a test cell. They can also be used for effect of a selected treatment on a test cell. They can also be used for containing cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AAZI7803-Z18342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, expression in the protein phosphatase genes, PASO enzyme genes, steroid receptor
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a second cell comprises: (a) obtaining the first cell and the second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New high expression vector for Escherichia coli useful for expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            groESL gene; expression vector; tac promoter; groEL; intergenic region; cephalosporin amidase; penicillin G amidase; PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; tive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                          superfamily genes or cadherin superfamily genes
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Best Local Similarity 85.0%
Matches 17, Conservative
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Escherichia coli.
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Porcine; totipotent cell; pluripotent; primordial germ cell; PGC; porcine stem cell factor; transgenic pig; xenotransplantation; ES; cell differentiation; gene regulation; embryonic development; pSCF embryonic stem cell; steel factor; PCR primer; ss.
AAX27716 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                 (BIOT-) BIOTRANSPLANT INC.
                                                                                                             PCR primer hGH S2.1.
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an inducer is not required to trigger expression of the heterologous protein. This may decrease the cost of the production of the protein and simplifies the fermentation process. The new vectors are used to obtain high yields of heterologous proteins expressed in microbial host cells, especially Bscherichia coli. In particular, the new vectors are used to express the enzymes cephalosporin amidase or penicillin G amidase
                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cyclin-dependent kinase 4; CDK4; antisense; G1/S phase transition; cancerous cell; cyclin D1; P16; tumour growth; ss.
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85.0%; Pred. No. 5.8e+02;
cive 0; Mismatches 3; Indels
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                                                                                                                                                                                         Best Local Similarity
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                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                           AAX60861/c
                                                                                                                                                                                                           Matches
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98WO-US016782 97US-0055643P

Baetscher M;

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The invention relates to an isolated porcine totipotent cell. A porcine pluripotent or totipotent cell (edc) or other totipotent cell with a porcine primordial germ cell (edc) or other totipotent cell with a porcine stem cell factor (pSCF). Cell lines produced are useful for the generation of transgenic pigs, and for xenotransplantation. They are also useful for studying cell differentiation and gene regulation during embryonic development. The use of totipotent or pluripotent cells, like embryonic stem (ES) cells, in a totipotent cell-embryo-injection-method enables specific gene alterations, which allow the study of specific gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ó
Production of pluripotent or totipotent porcine stem cell lines - by long -term culture of transfected murine STO feeder cells with a porcine stem cell factor, useful for, e.g. xenotransplantation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FADD; human; antisense; inhibitor; Fas-associated death domain; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.9%; Score 15.2; DB 1;
85.0%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                    function in a resulting chimeric animal line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                   Example 4; Page 34; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      424 ATGCGCAACCATCCCCCACG 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 ATGCGCACCCATTCCCCAAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human FADD primer ISIS #101862.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 85.0°
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ44825 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-APR-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ44825;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 335
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Gaps

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Query Match 0.9%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.8e+02; Matches 17; Conservative 0; Mismatches 3; Indels

1086 GGTGGTGACACTGTGGTACC 1105

ð g

20 GGTTGTTACACTCTGGTACC 1

RESULT 334

AAX27716

10017621-3sl.rng

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                                                                                                                                                                                                                                                              This invention describes novel antisense oligonucleotides (OGNs) (1) 8-20 mucleotides in length that specifically Mybridize with and inhibit nucleic acids encoding human Fas-associated death domain (FADD), targeted to the 3' untranslated region (3'UTR). (1) can be used to treat animals, especially humans, suspected of having or being prone to a disease or condition associated with FADD expression. AAZ44746-Z44831 represent primers and probes used in the method of the invention
                                                                                                                                                                              Antisense oligonucleotides, useful for inhibiting human Fas-associated death domain (FADD) expression are targeted to the 3' untranslated region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Typing polymorphic genes, useful to assess the association of alleles with diseases and in disease diagnosis, uses a taxonomy based sequence analysis in which a typing tree based on distinguishing sequences is
                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human leukocyte antigen; HLA; gene typing; infectious disease; autoimmune disease; inflammation; cancer; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.2; DB 1; Length 20;
35.0%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                         Zhang H;
                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Brunham K;
                                                                                                                                                                                                                                     Claim 3; Col 69-70; 37pp; English.
                                                                                                                         Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  46 GGACCAGCAGTGTGACTGCT 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAGTAACAGIGIGACIGCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAC68207 standard; DNA; 20 BP
                                       99US-00357072
                                                                   99US-00357072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAR-2000; 2000CA-02299675.
                                                                                                                                                                                                                                                                                                                                                                                                                      82.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gene typing PCR primer #2
                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 85.0
ses 17; Conservative
                                                                                                                         Cowsert LM,
                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYMA-) UNIV MANITOBA
                                                                                                                                                     WPI; 2000-126316/11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Brunham RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-679930/67.
                                                                                                                                                                                                           of the FADD gene.
                                      19-JUL-1999;
                                                                   19-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CA2299675-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2-MAR-1999;
             18-JAN-2000.
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                                                                                                                         Monia BP,
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                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 336
                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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Disclosure; Page 64; 125pp; English

constructed

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This invention relates to antisense compounds 8-30 mucleobases in length targeted to the 5'-untranslated region, translational start site, translational termination region or 3'-untranslated region of a nucleic a translational termination region or 3'-untranslated region of a nucleic acid encoding a p38 mitogen activated protein kinase (MAPK), where the antisense oligonucleotides inhibit the expression of MAPK. Sequences AAC79480 and AAC79501 represent human p88alpha MAPK and p38beta MAPK CDNA sequences. AAC79511 - AAC79500 and AAC79512 - AAC79512 and AAC79571 - AAC79580 represent human p38alpha antisense oligonucleotides, while AAC79502 - AAC79512 and AAC79571 - AAC79580 represent human p38alpha cDNA sequence AAC79523 and antisense oligonucleotides AAC79533 - AAC79531 sisolated from rat tissue. Murine p38beta MAPK CDNA is represented in AAC79537 and antisense oligonucleotides targeting the sequence are given in AAC79538 - AAC79552. The antisense oligonucleotides have antirheumatic; antiarthritic;
                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK, antirheumatic; antiarthritic; immunosuppressive; cardiant; heart disease; antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis;
                                         method
             The present invention provides a novel method for typing genes, particularly human leukocyte antigen (HLA) coding sequences. The method uses DNA sequences and a taxonomy-based sequence analysis method to assign alleles for HLA-DQB1 and HLA-DQB1. These alleles have been linked to diseases such as diabetes, IgA deficiency, multiple sclerosis, cancer, clinical and immunological manifestations of HIV infection, coeliac disease, idiopathic nephrotic syndrome, immune responses to parasite antigens, peophigus vulgaris, inflammatory bowel disease, rheumatoid arthritis, allergy and other inflammatory diseases
                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense compound targeted to p38 mitogen activated protein kinase inhibits protein kinase and is useful for diagnosing and treating inflammatory, autoimmune and heart disease.
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                                                                                                                                                                                                                                                                           DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                   Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human p38beta antisense oligonucleotide SEQ ID 29.
                                                                                                                                                                                                                            Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                      0.9%; Score 15.2; DB 1;
85.0%; Pred. No. 5.8e+02;
trive 0; Mismatches 3
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                                                                                                                                                                                                                                                                                                                                                          1427 TCTCCGCAGAGGATGCCATG 1446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 3; Page 43; 90pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВР
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAC79506 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                      Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monia BP, Gaarde WA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              phosphorothicate; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200059919-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 337
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$$88888888888
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Matches

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8X33333X8

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Human, globin, neuroprotective, nootropic, antiparkinsonian; antilipaemic; antiarterosclerotic; antidiabetic; dermatological; antiinflammatory; antiuloer; vulnerary; immunosuppressive; cell therapy; non-haematopojetic lineage cell; vascular disorder; arteriosclerosis; skin disorder; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New immortalized non-tumorigenic human middle ear epithelial cell line useful for studying gene and protein expression in otitis media, and for identifying chemical and biological agents for treating otitis media.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to a substantially pure cell line of immortalized non-tumorigenic human middle ear epithelial cells, which express an exogenous immortalizing gene. The cell line is useful for studying the molecular mechanisms involved in the pathogenesis that results in hearing disorders, e.g. hearing loss or otitis media. The clines are also useful for studying the normal cell shology of human middle ear epithelial cells. The cell lines can also be used as a screening tool for identifying agents that may be useful in therapy
                                                                                                    Immortal cell line; middle ear epithelial; hearing disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 15.2; DB 1; Length 20;
Pred. No. 5.8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 11; Page 30; 53pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1326 CAAGIACCGAGCCGAGGCCC 1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 CAAGTACTCAGCAGAGGCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human-specific globin primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
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                                                                                                                                                                                                                                                                                  26-MAY-2000; 2000WO-US014751.
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                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                         Chun Y, Rhim JS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.9
Best Local Similarity 85.0
Matches 17, Conservative
                                                                                                                       otitis media; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                 (HOUS-) HOUSE EAR INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-041148/05.
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                                                                                                                                                                                                      WO200073419-A1
                                                                                                                                                                                                                                                                                                                              28-MAY-1999;
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                                                                                                                                                               Unidentified.
                                                            Primer MUC5B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-JUL-2001
                       15-MAR-2001
                                                                                                                                                                                                                                              07-DEC-2000.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to the isolation of a canine Ob gene (obese gene) especially from beagle dogs. The gene is isolated from a dog DNA library using primers ABZ80676-ABZ80690. This sequene represents a PCR primer used to isolates the gene encoding the Ob protein. The invention also includes a vector comprising the DNA and a host cell transformed with the vector. The sequence is used for the large scale preparation of canine
immunosuppressive; cardiant and antiinflammatory activity. The antisense oligonucleotides are useful for inhibiting the expression of p38 MAPK in cells or tissues. The oligonucleotides are used for treating an animal with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid arthitis, or heart disease. The oligonucleotides are also useful for inhibiting inflammation or apoptosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A canine obese gene, its gene product, its preparation, its measuring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ss; dog; canine; obese gene; leptin; PCR; primer; amplification.
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                                                                                                                                                                                   0.9%; Score 15.2; DB 1; Length 20; 35.0%; Pred. No. 5.8e+02; ved. 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Beagle dog ob gene PCR amplification primer OBREV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                              Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1075 TACTCCAATGAGGTGGTGAC 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 8; 18pp; Japanese.
                                                                                                                                                                                                                                                                     764 TGCTCAAGGACCTCAAACAC 783
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                                                                                                                                                                                                        85.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MOMI ) MORINAGA & CO LTD
                                                                                                                                                                                                                             17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       reagent and measurement
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                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Canis familiaris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JP2000279171-A.
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RESULT 339
AAC91033/c
ID AAC910:
XX
AC AAC910:

Matches

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Gaps

; 0

3; Indels

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The present sequence is a PCR primer which was used to amplify human can an example illustrating an invention relating to a method for obtaining non-laematopoietic lineage cells from haematopoietic progenitor cells (HPCs). The non-hematopoietic lineage cells are useful corrected. The non-hematopoietic lineage cells are useful in the therapeutic treatment of various pathological conditions such as tissue repair, tissue transplantation and tissue reimplementation. They are useful for treating neurodegenerative disorders such as Alzheimer's disease, multiple sclerosis and Parkinson's disease, and vascular disorders such as arteriosclerosis, coronary artery disease, acrtic disorders such as arteriosclerosis, coronary artery disease, acrtic can eurysm and arterial diseases of the lower extremittes. The cells may be used in the treatment of other diseases associated with early also be used to treat disorders of the skin, such as excema and they procholesterolesment and familial combined hyperlipidaemia. They may also be used to treat disorders of the skin, such as excema and transplanted mice. PCR specific for human globin was performed with brain and muscle cells of the transplanted and nontransplanted mice. A PCR product was detected only in the brain cells, indicating that the human cells were only present in the brain
                                                                                                                                                                                                                Producing non-hematopoietic lineage cells from hematopoietic progenitor cells for use in tissue repair, transplantation, involves culturing the progenitor cells under environment that promotes cell differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human MEKK1; mitogen-activated protein kinase kinase l;
MEK kinase 1; MAP/ERK kinase kinase 1; pro-apoptotic;
apoptosis signal regulation; programmed cell death;
serine/threonine kinase; MAP kinase cascade; JNK/SAPK;
Jun N-terminal kinase/stress-activated protein kinase; Bcl-2 substrate;
NF-kappa-B-mediated transcription regulation; expression inhibition;
antisense; hyperproliferative disorder; cancer; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human MEKK1 phosphorothioate antisense oligonucleotide, SEQ ID NO:8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.8e+02;
tive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1627 GGCCCCAGCAGGCAGCGGCT 1646
                                                                                                                                 M, Banu N;
                                                                                                                                                                                                                                                                                                        Example 2; Page 32; 42pp; English
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                                                                                   (CELL-) CELL SCI THERAPEUTICS.
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                    23-SEP-1999; 99US-0156031P.
10-JUL-2000; 2000US-0217438P.
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les 17; Conservative
                                                                                                                              Pykett MJ, Rosenzweig
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                                                                                                                                                                         WPI; 2001-281603/29.
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Sequences AAF27125 represent phosphorothioate antisense oligonucleotides targetted to the human MEKKI gene, which inhibit its expression. The antisense oligonucleotides were designed to target different regions of the human MEKKI RNA, and were analysed for their different regions of the human MEKKI RNA, and were analysed for their ceffect on MEKKI mRNA levels by quantitative real-time PCR. MEKKI (also Known as mitogen-activated protein kinase kinase limes kinase limes kinase limes kinase limes kinase limes and MAP/ERK kinase limes and mAP/ERK kinase kinase selvases. MEKKI regulates signalling events associated with appropriate signalling events associated with have been associated with the development of hyperproliferative disorders such as associated with the development of hyperproliferative disorders such as cancer. Specifically, MEKKI lies directly downstream of Bcl-2 in an comportic signalling cascade, and plays a critical role in the control of NP-kappa-B-mediated transcription at multiple points in the apoptotic cascade. The oligonucleotides of the invention are useful for diagnosis, minimation and treatment of conditions associated with MEKKI expression, which is a prevention and treatment of conditions associated with MEKKI expression, when the conditions associated with a dependent of the condition are useful for diagnosis, when the conditions associated with a dependent of the condition and conditions associated with a dependent of the condition and conditions associated with a dependent of the condition and condition a
                                                                                                                                                                                                                                                                                                                                                                                            New antisense compound targeting nucleic acid encoding human mitogenactivated protein kinase kinase 1 (MEKK1), useful for treating diseases or conditions associated with MEKK1 expression, or preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            such as inflammation, and cancer and other hyperproliferative disorders
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Herl; antisense, prophylaxis; psoriasis; phosphorothioate backbone;
tumour; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
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/note= "2'methoxyethyl nucleotides"
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/note= "Phosphorothioate backbone"
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                                                                                                                                                                                                                                              Gaarde W,
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99US-00359756.
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'*tag= b
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                                                                                                                                                          (ISIS-) ISIS PHARM INC
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Best Local Similarity
Matches 17; Conserv
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23-JUL-1999;
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Unidentified.
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                                                                                                                                                                                                                                                                                                                                                        The invention relates to an antisense oligonucleotide targetted to a nucleic acid molecule encoding human epidermal growth factor receptor (Her1) to inhibit its expression. The antisense compounds are useful for treating diseases or conditions associated with Her-1 such as hyperproliferative diseases especially cancer (lung, ovarian, colon or prostrate cancer, and psoriaeis. They are also useful as research reagents, diagnostics, therapeutics, kits and prophylactically e.g. to prevent or delay tumour formation. The present sequence is an antisense oligonucleotide targetted to human Her-1
                                                                                                                                                                                                                                                                                                      Novel antisense oligonucleotide that specifically hybridizes with and inhibits nucleic acid encoding epidermal growth factor receptor, useful for treating hyperproliferative disease such as cancer or psoriasis.
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0
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                                                                                                                                                    /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                      Freier SM
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                                                                                                                                                   base= OTHER
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16. .20
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                                                                                                                                                                                                                                                                                                                                                                                            Making hypermutable cell for agricultural, pharmaceutical or environmental applications, by exposing cell to mismatch repair inhibitor such as anthracene, ATPase inhibitor, nuclease inhibitor or polymerase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; calreticulin; antisense compound; hyperproliferative disorder; cancer; autoimmune disease; viral infection; cardiovascular disease; antisense therapy; cytostatic; immunosuppressive; virucide; antisense; phosphorothioate backbone; ss.
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/mod base= OTHER
/note= "2'methoxyethyl nucleotides"
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/*tag=
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Matches 17; Conserv
WO200254856-A1
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                                                         18-JUL-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAD39520;
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The invention relates to antisense compounds, compositions and methods antisense compounds, particularly antisense oligonucleotides, targetted to mucleic acids encoding calreticulin. The antisense compound is useful for inhibiting the expression of calreticulin. The antisense compound is useful for inhibiting the expression of calreticulin in human calls or tissues. It is also useful for treating a human having a disease or condition associated with calreticulin, e.g., hyperproliferative disorder e.g. cancer, autoimmume disease, viral infection or cardiovascular disease, by inhibiting expression of calreticulin. It is useful for diagnostics, therapeuticis, prophylaxis and as research reagents and kits. It is also used in antisense therapy. The present sequence is an antisense compound targetted to human calreticulin. This sequence is used to study the
                                                                                                                                                                                                                                                                                                                                                                                                         Novel antisense compound targeted to nucleic acid encoding calreticulin, useful for treating a human having disease or condition associated with calreticulin e.g. cancer, viral infection, autoimmune disease.
                                    /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 3; Page 82; 109pp; English.
                                                                                         /*tag= d
/mod_base= m5c
                                                                                                                                                                                                                       30-OCT-2001; 2001WO-US049045,
                                                                                                                                                                                                                                                          30-OCT-2000; 2000US-00702327
                      *tag= c
                                                                                                                                                                                                                                                                                                                                   Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gapmer oligonucleotides
                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-479759/51
                                                                                                                                               WO200236743-A2
 modified base
                                                                          modified base
                                                                                                                                                                                                                                                                                                                                   Bennett CF,
                                                                                                                                                                                 10-MAY-2002
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WO200220842-A1.
                                                                                                                                                                                                                          14-MAR-2002
                                                                                                                                                                                Mus sp.
                         RESULT 346
                                    ABK50568,
                                                          ò
                                                                                                                                                                                                          Method for screening genomic DNA, target sequence, transgenic screening, organism identification; targeted mutagenesis screening method; mouse,
                        Gaps
                         .
0
/ Match 0.9%; Score 15.2; DB 1; Length 20; Local Similarity 85.0%; Pred. No. 5.8e+02; les 17; Conservative 0; Mismatches 3; Indels
                                          540 CATCTTTGACAAGCCCCTCA 559
                                                                CATCTTGACAACTTCCTCA 1
                                                                                                                    ABK50599 standard; DNA; 20 BP
                                                                                                                                                                 (first entry)
                                                                                                                                                                                    FAM modified probe #4.
                                                                                                                                                                30-JUL-2002
                                                                                                                                                                                                                                 probe; ss.
                                                                20
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RESULT 345 ABK50599/c

ò g

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The present invention relates to a method and apparatus for transgenic and targeted mutagenesis screening of genomic DNA. The method comprises depositing genomic DNA on a substrate, adding at least one labelled probe specific for a portion of the genomic DNA, and detecting the signal from the probe. The invention also provides a system for screening DNA for a designated genetic sequence, the system includes a computer having a processor, memory, web browser and an automatic screening device that analyses samples of genomic DNA for the designated sequence. The method is useful for detecting a designated genetic sequence in a sample of genomic DNA. The method is useful for rapid identification of an organism, whose genome possesses specific genetic sequences that exist endogenously or has been modified, mutated or genetically engineered. The method is more accurate, faster and is a high volume transgenic and targeted mutagenesis screening method. The screening results are provided to a researcher more quickly than by the prior art methods. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                     Detecting designated genetic sequence in genomic DNA sample, comprises depositing genomic DNA on substrate, adding labeled probe specific for portion of DNA and detecting signal from labeled probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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85.0%; Pred. No. 5.8e+02;
Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                               Example 4; Page 62; 126pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1593 CGTGGTGGACACCGAGTTCT 1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 CGTGGTGCACACCGTGTTAT 1
                                                          06-SEP-2000; 2000US-0230371P.
                  04-SEP-2001; 2001WO-US027404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 85.0 Matches 17; Conservative
                                                                                                                                                                                                               WPI; 2002-371884/40.
                                                                                                                         (HODG/) HODGE T A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          present invention
                                                                                                                                                                      Hodge TA;
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ABK50568 standard; DNA; 20 BP Mouse genomic DNA marker #4. (first entry) 30-JUL-2002 ABK50568;

Method for screening genomic DNA; target sequence; transgenic screening; organism identification; targeted mutagenesis screening method; mouse; organism ident. DNA marker; ds

04-SEP-2001; 2001WO-US027404. 06-SEP-2000; 2000US-0230371P. 04-SEP-2001; 2001US-00230371.

W0200220842-A1.

Mus sp

14-MAR-2002

(HODG/) HODGE T A.

Human; RecQ protein-like 4; RECQL4; ss; chromosome 8q24; infection; inflammation; tumour formation; cancer; cytostatic; antinflammatory; antimicrobial; antisense therapy; antisense oligonucleotide. Human RecQ protein-like 4 (RECQL4) DNA antisense oligonucleotide #74. 23-FEB-2001; 2001US-00792594. 23-FEB-2001; 2001US-00792594. (ISIS-) ISIS PHARM INC WPI; 2002-689941/74. Ward DT, Watt AT; US6436706-B1 20-NOV-2002 20-AUG-2002. ABS68931 Matches 엄 8

(first entry)

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Reco protein-like 4 (RECQL4) and which hybridises and inhibits the expression of RECQL4. The compound is useful for inhibiting the expression of RECQL4. The compound is useful for inhibiting the particularly a human suspected of having or being prone to a disease or condition associated with expression of RECQL4. The compound is useful for diagnostics, therapeuties and as a research reagent, e.g. prophylactically to prevent or delay infection, inflammation or tumour formation. This sequence represents an antisense oligonucleotide used in
                                                                                 The invention relates to a compound targeted to specific nucleobases of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Phosphorothioate oligonucleotide calreticulin inhibitor SEQ ID NO:54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                        inhibition of human RECQL4 expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1160 GGGGTGTGGCTGCTTC 1179
                           Claim 14; Col 46; 45pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 descricidescececareire 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADG34588/
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                               The present invention relates to a method and apparatus for transgenic and targeted mutagenesis screening of genomic DNA. The method comprises depositing genomic DNA on a substrate, adding at least one labelled probe specific for a portion of the genomic DNA, and detecting the signal from the probe. The invention also provides a system for screening DNA for a designated genetic sequence, the system includes a computer having a processor, memory, web browser and an automatic screening DNA for a consessor, memory, we browser and an automatic screening device that analyses samples of genomic DNA for the designated sequence. The method is useful for tagid identification of an corporate of the properties or a sample of corporate of the properties of the state or genome possesses specific genetic sequences that exist endogenously or has been modified, mutated or genetically engineered. The corporate of an areacticate faster and is a high volume transgenic and targeted mutagenesis screening method. The screening results are provided to a researcher more quickly than by the prior art methods. The present consequence represents a mouse genomic DNA marker used in the methods of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                               Detecting designated genetic sequence in genomic DNA sample, comprises depositing genomic DNA on substrate, adding labeled probe specific for portion of DNA and detecting signal from labeled probe.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1593 CGTGGTGGACACCGAGTTCT 1612
                                                                                                                                                                                                                                                                                                       Claim 9; Page 41; 126pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABS68931 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17; Conservative
                                                                                                     WPI; 2002-371884/40.
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                                            Hodge TA;
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Gaps

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Indels

0; Mismatches

BP

Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02;

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cytostatic, cardiant, virucide, osteopathic, and antiparasitic activity, and may act as a calreticulin-inhibitor, and have a use in antisense gene therapy. The antisense compound is useful for treating a disease or condition associated with calreticulin e.g. melanoma, viral warts, rubella, schistosomiasis, congenital heart block or osteoporosis. Further, it is useful as prophylaxis, research reagent and diagnostic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound that specifically hybridizes with and inhibits the expression of human calreticulin, useful for treating diseases e.g. osteoporosis or schistosomiasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleotides in length targeted to a nucleic acid molecule encoding human calreticulin, and specifically hybridises with and inhibits the expression of human calreticulin. A compound of the invention has
                                                                                                                           ss; human; antisense compound; calreticulin; cytostatic; cardiant; virucide; osteopathic; antiparasitic; antisense gene therapy; melanoma; viral warts; rubella; schistosomiasis; congenital heart block; osteoporosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel antisense compound, which is 8-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 54; 110pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kishimoto TK,
                                                                                                                                                                                                                                                                                                                                                                                                                  INGELHEIM PHARM INC.
                                                                                                                                                                                                                                                                                                                              30-OCT-2001; 2001WO-US048485.
                                                                                                                                                                                                                                                                                                                                                               22-FEB-2001; 2001US-00791406
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bennett CF, Rothlein R,
                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC
(BOEH ) BOEHRINGER ING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-750420/81
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New antisense compounds targeted to nucleic acids encoding RecQ protein-like 4, useful for modulating expression of the nucleic acid and treating diseases associated with expression of the nucleic acid in humans.

The present sequence is used in the exemplification of the invention. The sequence is a phosphorothicate oligonucleotide, having 2'-MOE wings and a

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Gaps

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3; Indels

Length 20;

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/note= "phosphorothioate backbone, nucleotides 1-6 and 15
-20 are 2'-methoxyethoxy (MOE) nucleotides, nucleotides 7
-14 are 2'-deoxy- nucleotides, all C nucleotides are 5-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound, useful for preparing a composition for diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleobases in length targeted to a nucleic acid molecule encoding p38 mitogen-activated protein kinase (MAPK). The products of the invention have antiarthritic and antiinflammatory activity, can act as act as kinase inhibitors. The antisense compound is useful for preparing a composation for diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid arthritis or for use in antisense gene therapy. This sequence represents an antisense oligonucleotide used in a method to
                                                                                                                                                                                                                                                                                                                                                                   p38 mitogen-activated protein kinase; p38 MAPK; phosphorothioate; antisense; antiarthritic; antiinflammatory; kinase inhibitor; human; inflammatory disease; rheumatoid arthritis; gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes a novel antisense compound, which is 8-30
                                                                                                                                                                                                                                                                                                                                        Human p38-beta MAPK oligonucleotide ISIS NO 17895.
                                                        Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                    Score 15.2; DB 1;
Pred. No. 5.8e+02;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 3; Col 23-24; 44pp; English.
                                                                                                                                                540 CATCTTTGACAAGCCCCTCA 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                methyl cytosines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER
                                                                                                                                                                  20 CATCTTTGACAACTTCCTCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nero P,
                                                                                                                                                                                                                                                   ABX78105 standard; DNA; 20 BP
                                                                                  0.9%;
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/mod_base=
                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                  17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-089122/08
                                                                                                     Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-APR-1999;
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                                                                                                                                                                                                                                                                                                            16-APR-2003
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                                deoxy gap.
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                                                                                     Query Match
                                                                                                                                                                                                                      RESULT 349
ABX78105/c
                                                                                                                 Matches
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0.9%; Score 15.2; DB 1; Length 20;

Query Match

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The present invention describes a compound (I) that is 8-50 nucleobases in length targeted to a nucleic acid molecule encoding a 5'UTR, 3'UTR, coding region, intron region, stop codon, intron:exon junction, exon:exon junction, or 5' mRNA variant of src-c, and which specifically hybridises with and inhibits the expression of src-c. (I) activities, and can be used in antisense therapy and in vaccines. The antisense compounds (I) can be used for modulating the expression of src-c and for treating diseases or conditions associated with expression of
                                                                                                                                                                                                                                                                                          osteopathic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotides targeted to nucleic acids encoding src-c, useful for diagnosing, treating or preventing diseases associated with the expression of src-c, e.g. cancer or inflammation, and in research
                            Gaps
                                                                                                                                                                                                                                                                                    Mouse; src-c; tyrosine kinase; src-c inhibitor; cytostatic; osteopati antiinflammatory; antibacterial; antisense therapy; vaccine; cancer; antisense oligonucleotide; aberrant bone remodaling; breast cancer; hyperproliferative disorder; pancreatic cancer; lung cancer; tumour; ovarian cancer; oesophageal cancer; neuroblastoma; retinoblastoma; Kaposi's sarcoma; infection; inflammation; tumour formation;
                                                                                                                                                                                                                                                          Mouse src-c chimeric phosphorothioate oligonucleotide SEQ ID NO:163.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note= "2'-0-methoxyethyl gapmer (2'-MOE wing)"
                            ..
0
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                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      note= "phosphorothioate linkages"
           Pred. No. 5.8e+02;
; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              location/Qualifiers
                                                        764 TGCTCAAGGACCTCAAACAC 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .5
/*tag= a
/mod_base= OTHER
85.0%; Fig. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         base= OTHER
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                                                                                                                                                                ABZ59542 standard; DNA; 20 BP
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         Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                   phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Watt AT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                             ABZ59542;
                                                                                                                                  RESULT 350
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New human tweery homolog 2 polypeptides and polynucleotides, useful for producing an antigen-binding molecule that is immuno-interactive with the polypeptide or as diagnostic markers for cancers.
particularly cancer, such as breast cancer, pancreatic cancer, lung cancer, osophageal cancer, neuroblastoma cancer, osophageal cancer, neuroblastoma, retinoblastoma or Kaposi's sarcoma. (1) are also useful for diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay infection, inflammation or tumour formation, as research reagents and kits, and in distinguishing between functions of various members of a biological pathway. The present sequence represents a mouse suc-c antisense chimeric phosphorothioate oligonucleotide, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; tweety homologue 2; TTYH2; therapy; cancer; tumour; cytostatic; diagnostic marker; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human TTYH2 intron C amplifying reverse PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                   Seguence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYQU-) UNIV QUEENSLAND TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1028 IGGCIGACTITGGCCIGGCC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 redeceaerirederredec 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAD52909 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-MAY-2001; 2001AU-00004971.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-MAY-2002; 2002WO-AU000591
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 85.0 es 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-129264/12.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Clements JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD52909;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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IID AAD5

AAC AAD5

XX AAD 14-M

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YO 21-N

YO 2
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The present invention relates to a method of quantifying in vivo RNA from a biological sample. This involves collecting the biological sample in a cube comprising a compound inhibiting RNA degradation and/or gene induction, forming a precipitate comprising nucleic acids, separating the precipitate from the supernatant, dissolving the precipitate using a buffer, forming a suspension, isolating nucleic acids from the suspension using an automated device, dispersing or distributing a reagent mix for reverse transcription (RY)-PCR using an automated device, dispersing or distributing the nucleic acids isolated within the dispersed reagent mix cusing an automated device and determining the in vivo levels of transcripts using the nucleic acids level in vivo levels of setecting changes in in vivo nucleic acids levels in a biological agent present, such as eukaryotic or prokaryotic cells, viruses or phages in a biological sample or for producing a medicament for treating immune collected disease, e.g., autoimmunity, rheumatoid arthritis, multiple
                                                                                                                                                                                                                                                             Nucleic acid level determination; PCR; primer; probe; DNA quantification; gene therapy; immunosuppressive; anti-HIV; antiarthritic; neuroprotective; cytostatic; antiallergic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Quantifying in vivo RNA from a biological sample for producing a medicament for treating immune related disease by determining in vivo levels of transcripts using nucleic acid/reverse transcription-PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sclerosis, cancer, immunodeficiencies such as AIDS, allergy, graft rejection or Graft versus Host Disease. The present sequence is a PCR primer/probe used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
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85.0%; Pred. No. 5.8e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 1 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                              Real time PCR targeting IL-1ra PCR primer F43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 44; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   713 GACTGGAACATGAAGAGGGG 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         setup
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20 GGACCTAGAGCAGCACCTGG 1
                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-JAN-2003; 2003WO-EP000493.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-JAN-2002; 2002EP-00447009.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ULBR ) UNIV LIBRE BRUXELLES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     reagent mix in an automated
                                                                                                                 ACF04494 standard; DNA; 20
                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Goldman M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-598531/56.
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                                                                                                                                                                                                                                                                                                                                                                                WO2003060119-A2
                                                                                                                                                                                                                                                                                                                                             Unidentified
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                        ACF04494;
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Matches
                                                                              RESULT 352
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RESULT 353

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Gaps ö

3; Indels

0; Mismatches

Query Match 0.9%; Best Local Similarity 85.0%; Matches 17; Conservative

0.9%; Score 15.2; DB 1; Length 20; 35.0%; Pred. No. 5.8e+02;

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/note= "OTHER= Nucleotides 1-5 and 15-20 are 2'-0-methoxyethyl's (2-MOB)'s separated by a gap region of 2'-deoxynucleotides. Nucleotides 1-20 have a phosphorothioate backbone. All cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to antisense compounds, compositions and methods used for modulating the expression of matrix metalloproteinase 1 (MMP1). Specifically claimed, are antisense oligonucleotides capable of modulating the expression of MMP1, and which comprise any of the 55 sequences of 20 bp, fully defined in the specification. The compound, composition and methods are useful for treating a disease or condition associated with MMP1, such as hyperproliferative disorder, e.g. cancer, inflammatory disorder or atherosclerosis, by inhibiting the expression of MMP1. They are also useful in research and diagnostics for modulating the expression of MMP1. They are also useful in research and diagnostics for modulating the expression of MMP1. The antisense compounds can act as MMP1 inhibitors and have the following activities: cytostatic. antiinflammarry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and have the following activities: cycostatic, antiinflammatory, and antiarteriosclerotic. This polynucleotide sequence represents one of the antisense compounds used for modulating the expression of matrix
                                                                                                                                                                   antisense; modulating; expression; matrix metalloproteinase 1; MMP1; hyperproliferative disorder; cancer; inflammatory disorder; atheroselerosis; MMP1 inhibitor; cytostatic; antiinflammatory; antiarteriosclerotic; ss; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding matrix metalloproteinase 1 (MMP1), useful for treating a disease/condition associated with MMP1, such as
                                                                                                                                 Matrix metalloproteinase 1 antisense oligonucleotide, SEQ ID No 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.8e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    metalloproteinase 1 of the invention.
                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 3; Page 74; 99pp; English.
               ADB79146 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-OCT-2001; 2001US-00035485.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-OCT-2002; 2002WO-US032940.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hyperproliferative disorder.
                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                     /mod base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-393515/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003033659-A2
                                                                                                                                                                                                                                                                                                                           Key
modified_base
                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                           04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-APR-2003
                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Baker BF,
                                                       ADB79146;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
ADB79146/c
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Novel feline leptin polypeptide encoded by a feline ob gene which is related to obesity in cats, useful for diagnosing and treating obesity.

31-JUL-2001; 2001JP-00230711. 31-JUL-2001; 2001JP-00230711

JP2003038187-A

Unidentified

(MOMI) MORINAGA & CO LTD

WPI; 2003-527653/50.

Example; SEQ ID NO 6; 18pp; Japanese.

feline; cat; leptin; leptin inhibitor; obesity; PCR; ss; primer.

Leptin gene-specific PCR primer #2.

15-JAN-2004 (first entry)

ADD19339 standard; DNA; 20 BP.

RESULT 354 ADD19339/ ADD19339

The invention comprises the amino acid and coding sequences of feline leptin proteins. The DNA and protein sequences of the invention are useful for screening for a compound which inhibits the activity of leptin. The DNA and protein sequences of the are also useful for diagnosing and treating obseity. The present DNA sequence represents PCR primer that was used in an example of the invention.

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Gaps
                        :0
                                                                                                                                                            PCR primer #2 used to illustrate microorganism breeding method.
                       3; Indels
                       0; Mismatches
                                        1075 TACTCCAATGAGGTGGTGAC 1094
                                                          20 racrccacadadergergec 1
                                                                                                                                                                               Microorganism; PCR; primer; ss.
                                                                                                                                                                                                                                                       07-AUG-2001; 2001JP-00239331.
                                                                                                                                                                                                                                                                          07-AUG-2001; 2001JP-00239331.
                                                                                                                                                                                                                                                                                          (MITU ) MITSUBISHI CHEM CORP
                                                                                                      ADE71316 standard; DNA; 20
                                                                                                                                          29-JAN-2004 (first entry)
Query Match
Best Local Similarity 85.05
                                                                                                                                                                                                                  JP2003047477-A.
                                                                                                                                                                                                                                     18-FEB-2003
                                                                                                                                                                                                 Synthetic.
                                                                                                                       ADE71316;
                                                                                     RESULT 355
                                                                                              ADE71316,
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0
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Gaps

0

3; Indels

962 AGAAGGTGCTACACCGAGAC 981

17; Conservative

Similarity

Best Loca Matches

AGAATGTGCTACACGGATAC 1

20

. 0

0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02;

Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

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Breeding microorganism cell whose host character is changed by expression of introduced insertion sequence, by introducing the sequence into the genome and is transformed using DNA which has the insertion sequence.
                                                                                                                                                                                                                                                                                                           Example 3; SEQ ID NO 2; 20pp; Japanese
WPI; 2003-508704/48
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The present invention relates to a method (MI) for breeding microorganism cells whose host character is changed by the expression of the introduced insertion sequence. The method involves introducing the insertion sequence into the genome and is transformed using DNA which has the insertion sequence. The present sequence is a PCR primer, which was used in an example from the invention. Gaps ö Ouery Match 0.9%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.8e+02; Matches 17; Conservative 0; Mismatches 3; Indels Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other; 1464 CAGTCTGGGGGAGCGGATCC 1483

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(first entry) 129/c ADF88129 standard; DNA; 26-FEB-2004 ADF88129; RESULT 356 ADF88129/c

20 BP

human; single nucleotide polymorphism; microarray; side effect; ss; Single nucleotide polymorphism detection primer, SEQ ID No 1712 primer; PCR Synthetic

12-FEB-2002; 2002JP-00034717 JP2003235571-A. Homo sapiens 26-AUG-2003

(KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN

12-FEB-2002; 2002JP-00034717

Novel polynucleotide useful for detecting single nucleotide polymorphisms WPI; 2003-820454/77

Claim 2; SEQ ID NO 1712; 704pp; Japanese.

in human gene.

The invention relates to a novel polynucleotide isolated and purified from a human gene having any one of 935 fully defined sequences as given in specification, or a sequence having a base substitution. The invention but the invention of the invention polymorphisms, a PCR primer set chosen from the combination of two DNA fragments from any one of 1220 fully defined sequences as given in specification; a labelling probe containing the SNP containing oligo, and a microarray equipped with the SNP containing the single nucleotide polymorphisms in human gene. The isolated human gene is also useful for detecting the single nucleotide diagnosis of disease and determination of side effect to a medical agent. The isolated human gene is also effective in detecting single nucleotide polymorphisms in a human gene. This polymucleotide sequence represents

Acyl CoA cholesterol acyltransferase-2 antisense oligo ISIS #143028.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention comprises isolated human gene sequences and PCR primer sequences which can be used to detect single nucleotide polymorphisms (SNPs). The DNA sequences of the invention are useful for detecting SNPs existing in human genes and for the diagnosis of human disease. The present DNA sequence represents a human gene PCR primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Polynucleotide for detecting single nucleotide polymorphisms existing in human gene, contains isolated human gene having specified sequence.
                                                                                                    Gaps
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one of the PCR primers used in the single nucleotide polymorphism detection method of the invention.
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                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                      single nucleotide polymorphism; SNP;
                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                          Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other
                                                                    Score 15.2; DB 1;
Pred. No. 5.8e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; SEQ ID NO 1109; 529pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                        human; gene sequence; single nucleo
disease diagnosis; ss; PCR; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           135 GAAGAAGATCAAACGGCAGC 154
                                                                                                                                 873 CCTGGATGACTGTGGGAACA 892
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                                                                       Query Match 0.9%;
Best Local Similarity 85.0%;
Matches 17; Conservative (
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                                                                                                                                                                                                                                     ADH93272 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                         Human gene PCR primer #117
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                                                                                                                                                                                                                                                                                            (first
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                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
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disease
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to novel antisense oligonucleotides which are targeted to human acyl CoA cholesterol acyltransferase-2 (ACAT-2) nucleotide sequence (ACC42409-ACC42411), and mouse ACAT-2 (ACC42432-ACC42457). The antisense oligonucleotides specifically hybridise with and inhibit the expression of ACAT-2 nucleotide sequences (ACC42395 and ACC42402). ACAT enzymes catalyse the synthesis of cholesterol esters from tree cholesterol and fatty acyl-CoA. The antisense oligonucleotides are useful for treating an animal which has a disease or condition associated with ACAT-2, e.g. a condition involving abnormal lipid metabolism, a condition involving abnormal lipid metabolism, atherosclerosis, or
                                                                                                              /mod_base= OTHER
/note= "Oligonucleotide has phosphorothioate backbone and
all cytidine nucleotides are 5-methylcytidine. Optionally
some nucleotides with 2'-methoxyethyl (2'-MOE wings)
Acyl CoA cholesterol acyltransferase-2; antisense therapy; antilipemic; antiatriosclarotic; cardiovascular; ACAT-2; lipid metabolism; cholesterol metabolism; atherosclerosis; cardiovascular disease; phosphorothioate; mouse; ss.
                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides for modulating acyl CoA cholesterol acyltransferase-2, e.g. for preventing or treating diseases associated with abnormal lipid or cholesterol metabolism, atherosclerosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisense; p38 mitogen activated protein kinase; p38 MAPK;
inflammatory disease; autoimmune disease; rheumatoid arthritis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 3 A; 10 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human p38 MAPK antisense oligonucleotide #25.
                                                                                                                                                                                                                                                                                                      Lemonidis KM
                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GIGGCCIGGCCTACTGCCAC 957
                                                                                                                                                                                                                                                                                                                                                                                                        Claim 3; Page 90; 112pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGGCCTGGCCCACAGCCAC 20
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                                                                                                                                                             modification
                                                                                                                                                                                                                                 LS-JUL-2002; 2002WO-US022746
                                                                                                                                                                                                                                                       30-JUL-2001; 2001US-00918026
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/*tag= a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      heart disease; ss; human.
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                                                                                                                                                                                                                                                                                                     Crooke RM, Graham MJ,
                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                  cardiovascular disease
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                                                                                                                                                                                    WO2003011889-A2
                                                                               Key
modified base
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                                                        Synthetic
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Best Local S
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                                                                                                                                                                   /note= "Phosphorothioate linkages. All cytosines are 5-
methyl cytosines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides for modulating p38 mitogen activated protein kinase (MAPK) expression, useful for diagnosing, preventing or treating diseases associated with p38 MAPK, e.g. inflammation or heart
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35.0%; Pred. No. 5.8e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "2'-methoxyethoxy nucleotides"
                                                                                                                                                                                                                                                                                                          'note= "2'-methoxyethoxy nucleotides
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                                                    location/Qualifiers
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                                                                                                                                         mod base= Other
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15-AUG-2000; 2000US-00640101
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*tag= a
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nes 17; Conservative
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(GAAR/) GAARDE W A.
(NERO/) NERO P.
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                                                    Key
modified_base
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Homo sapiens
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The present invention relates to antisense compounds targeted to a nucleic acid encoding G protein-coupled receptor (GPCR) Kinase 6 (GRK6). The antisense compound comprises an antisense oligomucleotide that specifically hybridises with the nucleic acid and inhibits the expression of GRK6. The antisense oligomucleotide is a chimeric oligomucleotide. The antisense oligomucleotide is a chimeric oligomucleotide. The antisense oligomucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligomucleotide further comprises at least one modified nucleobase, preferably a 5-methylcytosine. The antisense oligomucleotides are useful for the treatment of diseases such as cheumatoid arthritis, drug addiction, uterine contractility, hypertension, and diseases or conditions arising from aberrant hematopoiesis. The present sequence represents an antisense oligomucleotide used in the examples of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 New compounds, particularly antisense oligonucleotides targeted to a
nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
for treating diabetes, drug addiction, uterine contractility and
/note= "This oligonucleotide has a phosphorothioate backbone and 2'-methyoxyethyl (2'-MOB) wings at the 5' and 3' ends, which are 5 nucleotides in length at each end. All cytidine residues are 5-methylcytidines"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match

0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 69; 58pp; English.
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ID ADH48321 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-052027/05.
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                                                                                                                        US2003228689-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Making hypermutable cell by exposing cell to inhibitor of mismatch repair e.g. an anthracene, an ATPase inhibitor, a nuclease inhibitor or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a method for making a hypermutable cell. The method comprises exposing a cell to an inhibitor of mismatch repair, where the inhibitor is an anthracene, an AFPase inhibitor, a nuclease inhibitor, or an antisense oligonucleotide that specifically hybridises to a nucleotide encoding a mismatch repair protein. The method further involves: testing the animal or plant to determine whether the gene of interest comprises a mutation. The method is useful for making a hypermutable cell. The present sequence is a PCR primer used for sequencing GUS (beta-glucoronidase) cDNA.
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                                                                                                    Hypermutable cell; mismatch repair; MMR protein; primer; PCR;
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85.0%; Pred. No. 5.8e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
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                                                        GUS cDNA sequencing PCR primer, GUS-1033R.
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         11-MAR-2004 (first entry)
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Best Local Similarity 85.0
Matches 17; Conservative
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*tag=
                                                                                                                                                                                                                                                                                                                                                                                   (GRAS/) GRASSO L.
(SASS/) SASS P M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            e.g. an anthracene, a
polymerase inhibitor.
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                                                                                                                                                                                               US2003091997-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nicolaides NC,
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modified_base
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                                                                                                                                                   Unidentified
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RESULT 361

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Gaps

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New antisense oligonucleotides for modulating junctional adhesion molecule 3 expression, useful for diagnosing, preventing or treating conditions associated with the adhesion molecule, e.g. multiple sclerosis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides for modulating junctional adhesion molecule 3 expression, useful for diagnosing, preventing or treating conditions associated with the adhesion molecule, e.g. multiple sclerosis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           reagents or kits. The present sequence represents a human junctional adhesion molecule 3 (JAM 3) antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ss; junctional adhesion molecule 3; JAM 3; autoimmune disorder; multiple sclerosis; organ rejection; inflammation; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.9%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.8e+02;
trive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 50; 57pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
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WPI; 2004-061251/06.
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                                                                                                                                                                                     or organ rejection.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 364
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to antisense compounds targeted to a mucleic acid encoding G protein-coupled receptor (GPCR) kinase 6 (GRK6). The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of GRK6. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxycthyl (2'-MOE) sugar moiety. The antisense oligonucleotide further comprises at least
                                                                                                                                                                                                                                                                                                                                                                                              New compounds, particularly antisense oligonucleotides targeted to a
nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
for treating diabetes, drug addiction, uterine contractility and
hypertension.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                haematopoiesis. The present sequence represents a human GRK6 DNA target sequence for an antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         one modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotides are useful for the treatment of diseases such as rheumatoid arthritis, drug addiction, uterine contractility, hypertension, and diseases or conditions arising from aberrant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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85.0%; Pred. No. 5.8e+02;
Live 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 123; 58pp; English.
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                                                                                                31-MAY-2002; 2002US-00159856.
                           31-MAY-2002; 2002US-00159856.
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Matches 17; Conservative
                                                                                                                                                                         (ISIS-) ISIS PHARM INC
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                                                                                                                                                                                                                                                   Freier SM, Dobie KW;
                                                                                                                                                                                                                                                                                                                        WPI; 2004-052027/05.
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Query Match

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to nucleic acids encoding a mammalian glucocorticoid receptor. The antisense oligonucleotides of the invention are useful for preventing or delaying infection, inflammation or tumour formation. The antisense oligonucleotides are also useful treating diabetes, obesity, cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The present DNA sequence represents an antisense oligonucleotide that targets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound targeted to a nucleic acid molecule encoding mammalian glucocorticoid receptor, useful for treating diabetes, obesity, cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the human glucocorticoid receptor gene. NOTE: The present sequence contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention comprises an antisense oligonucleotides that are targeted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pain modulator; PIM kinase family; locked nucleic acid; LNA; phosphorothicate; analgesic; uropathic; antipruritic; cytostatic; antisflammatory; antiasthmatic; antisense; inhibition; gene therapy; tactile allodynia; urinary incontinence; neurogenic bladder; pruritus; tumour; asthma; primer; ss.
                                                                                                                                              Human glucocorticoid receptor-specific antisense oligonucleotide #226
                                                                                                                                                                                         antisense oligonucleotide; glucocorticoid receptor; infection; inflammation; tumour formation; diabetes; obselty; scardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
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Pred. No. 5.8e+02;
0; Mismatches 3; Indels
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                    BP.
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Best Local Similarity 85.v.
Best Local 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-035034/03.
                                                                                                                                                                                                                                                                                                                                                   WO2003099215-A2.
                                                                                                                                                                                                                                                                                                           Homo sapiens
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ADH63392/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      to nucleic acids encoding a mammalian glucocorticoid receptor. The antisense oligonucleotides of the invention are useful for preventing or delaying infection, inflammation or tumour formation. The antisense oligonucleotides are also useful for treating diabetes, obesity, cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The present DNA sequence repersents an antisense oligonucleotide that targets the human glucocorticoid receptor gene. NOTE: The present sequence contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense compound targeted to a nucleic acid molecule encoding mammalian glucocorticoid receptor, useful for treating diabetes, obesity, cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense oligonucleotide; glucocorticoid receptor; infection; infilammation; tumour formation; diabetes; obesity; cardiovascular disorder: hyperlipidaemia; Cushing's syndrome; human; ss; phosphorothicate backbone; 2-methoxyethyl; 2'-MOE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention comprises an antisense oligonucleotides that are targeted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human glucocorticoid receptor-specific antisense oligonucleotide #480
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reagents or kits. The present sequence represents a human junctional adhesion molecule 3 (JAM 3) target sequence.
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Pred. No. 5.8e+02;
0; Mismatches 3; Indels
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                                                                 Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                          Score 15.2; DB 1;
Pred. No. 5.8e+02;
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                                                                                                                                                                                                  585 ATCTGAGATTGGCTTTGGGA 604
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                                                                                                            0.9%;
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                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nalseth AE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-035034/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003099215-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Crosby SD,
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Gaps

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20

g ð

Matches

RESULT 366

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This invention describes novel oiigonuclectides or polynuclectide constructs which are used in pharmaceutical or diagnostic compositions. The oligonuclectides are used for identifying modulators of pain, based on the ability of labelled oligonuclectides on also be used to diagnose disease associated with altered expression of genes of the PIM kinase family by measuring binding. The oligonuclectides have at least one modified ribose, phosphodiester and/or base component. Particularly many, of the muclectides are 'locked nucleic acids' (LNA) or at least one of the muclectides are 'locked nucleic acids' (LNA) or at least one nuclectide is a phosphorothioate. The polynuclectide construct comprises a riboxyme, DNA enzyme, vector (particularly for expression) or peptide nucleic acid, most preferably a hammerhead ribozyme or Type B-17 DNA enzyme. Than bo attached to a carrier (preferably the proteins tet, transportin or ferritin) and/or encapsulated in a liposome. The products of the invention have analgesic, uropathic, antipuritic, cytostatic, antiinflammatory and antiasthmatic activity and can be used for antisense and catalytic inhibition of PIM kinases and for antisense gene therapy. The oligonuclectides are useful for treating (1) pain, especially continence, neurogenic bladder symptoms, pruritus, tumours and catalymax incontinence, neurogenic bladder symptoms, pruritus, tumours and asthma, or generally any PIMI-kinase associated inflammation such as asthma, or generally any PIMI-kinase associated inflammation such as associated with expression of PIM family genes. ADI26552-ADI26627 incepresent antisense oligonuclectides described in the disclosure of the
                                                                                                                                                                                                                                                                                                                                                                            New oligonucleotides directed against PIM1 kinase, useful for treating, e.g. pain, urinary incontinence, tumors and inflammation, by gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes novel oligonucleotides or polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     / Match 0.9%; Score 15.2; DB 1; Length 20; Local Similarity 85.0%; Pred. No. 5.8e+02; les 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                       Erdmann V;
                                                                                                                                                                                                                                                                                  Gruenweller A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 3; 37pp; German.
                                                                                                                                             12-JUN-2003; 2003WO-EP006158
                                                                                                                                                                                           14-JUN-2002; 2002DE-01026702.
                                                                                                                                                                                                                                    (CHEF ) GRUENENTHAL GMBH
                                                                                                                                                                                                                                                                                  Kurreck J,
                                                                                                                                                                                                                                                                                                                                WPI; 2004-142780/14
                                              WO2003106681-A2
                                                                                              24-DEC-2003
    Rattus sp.
                                                                                                                                                                                                                                                                                  Altan O,
                                                                                                                                                                                                                                                                                                                                                                                                                      therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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The invention relates to a compound targeted to and which specifically hybridises with a nucleic acid molecule encoding cell division cycle 2, and inhibits the expression of cell division cycle 2. The compound, composition and methods are useful for treating a disease or condition associated with cell division cycle 2, such as hyperproliferative disrorder. e.g. cancer, or a disease or condition resulting from dysrequlation of bone metabolism, or Alzheimer's disease. They are also useful in research and diagnostics for modulating the expression of cell division cycle 2. The present sequence represents a human cell division

Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

cycle 2 target sequence.

0.9%;

Query Match

nucleic acid encoding cell division cycle 2, useful for treating cancer, a disease resulting from dysregulation of bone metabolism or Alzheimer's

Example 15; SEQ ID NO 119; 61pp; English.

disease

New compounds, particularly antisense oligonucleotides targeted to a

02-JUL-2002; 2002US-00189266 02-JUL-2002; 2002US-00189266.

US2004006029-A1

08-JAN-2004.

Homo sapiens.

(ISIS-) ISIS PHARM INC

Dean NM, Freier SM; WPI; 2004-081741/08

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Score 15.2; DB 1; Length 20;
Pred. No. 5.8e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                      Human cell division cycle 2 target sequence ISIS 124847.
                                                                                                                                                                                                                                                hyperproliferative disorder; cancer; bone metabolism; Alzheimer's disease; human; cell division cycle 2; ss.
                                                   1031 CTGACTTTGGCCTGGCCCGA 1050
                                                                           1 crearrireccireccaea 20
                                                                                                                                           ADI27456 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                    02-JUL-2002; 2002US-00189266
                                                                                                                                                                                                                                                                                                                                                                                              02-JUL-2002; 2002US-00189266.
                                                                                                                                                                                               (first entry)
          Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Freier SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-081741/08
                                                                                                                                                                                                                                                                                                                US2004006029-A1
                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                               22-APR-2004
                                                                                                                                                                                                                                                                                                                                           08-JAN-2004.
                                                                                                                                                                     ADI27456;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dean NM,
                                                                                                                  RESULT 369
                                                  ö
                                                                            q
                                                                                                                                           ö
                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                 Human cell division cycle 2 target sequence ISIS 124874
                                                                                                                                                                                                                                                                                                                                                                                                                                           hyperproliferative disorder; cancer; bone metabolism; Alzheimer's disease; human; cell division cycle 2; ss.
                                                                                                                                                                                                                                            254 CTGGAGAGCCCCCACACGT 273
                                                                                                                                                                                                                                                                   crecadeccceaaccer 1
                                                                                                                                                                                                                                                                                                                                        ВЪ
                                                                                                                                                                                                                                                                                                                                    ADI27476 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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22-APR-2004

ADI27476;

RESULT 368

AD1274

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Gaps

.; 0

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New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding cell division cycle 2, useful for treating cancer, a disease resulting from dysregulation of bone metabolism or Alzheimer's
                                                                                                                                                                     disease
```

Example 15; SEQ ID NO 99; 61pp; English

The invention relates to a compound targeted to and which specifically hybridises with a nucleic acid molecule encoding cell division cycle 2, and inhibits the expression of cell division cycle 2. The composition and methods are useful for treating a disease or condition associated with cell division cycle 2, such as hyperpoliferative disorder e.g. cancer, or a disease or condition resulting from dysregulation of bone metabolism, or Alzheimer's disease. They are also useful in research and diagnostics for modulating the expression of cell division cycle 2. The present sequence represents a human cell division cycle 2 target sequence.

Sequence 20 BP; 9 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Gaps . Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02; 0; Mismatches 3; Indels 0.9%; Local Similarity 85.0%; hes 17; Conservative Query Match

ö

710 TCAGACTGGAACATGAAGAG 729 rcagacragaagrgaagag 20

> g 8

ADI27409 standard; DNA; 20 RESULT 374
AD127409/C
LID AD127409/C
AXC AD122
XX AD127
XX AD127
XX AD126
XX HOMO
OS SYNLE
XX C
RN OS C
RN OS

BP

(first entry) 22-APR-2004 Human cell division cycle 2 antisense oligonucleotide ISIS 207240

disorder; cancer; bone metabolism;
thuman; cell division cycle 2; ss; antisense. hyperproliferative di Alzheimer's disease;

Homo sapiens Synthetic.

US2004006029-A1.

08-JAN-2004

02-JUL-2002; 2002US-00189266

02-JUL-2002; 2002US-00189266.

(ISIS-) ISIS PHARM INC

Dean NM, Freier SM;

WPI; 2004-081741/08.

New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding cell division cycle 2, useful for treating cancer, a disease resulting from dysregulation of bone metabolism or Alzheimer's disease

Example 15; SEQ ID NO 52; 61pp; English.

The invention relates to a compound targeted to and which specifically hybridises with a nucleic acid molecule encoding cell division cycle 2, and inhibits the expression of cell division cycle 2. The compound, composition and methods are useful for treating a disease or condition associated with cell division cycle 2, such as hyperproliferative disorder e.g. cancer, or a disease or condition resulting from

ó New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding cell division cycle 2, useful for treating cancer, a disease resulting from dysregulation of bone metabolism or Alzheimer's dysregulation of bone metabolism, or Alzheimer's disease. They are also useful in research and diagnostics for modulating the expression of cell division cycle 2. The present sequence represents a human cell division cycle 2 antisense oligonucleotide. Gaps Human cell division cycle 2 antisense oligonucleotide ISIS 207213. antisense .. 0 Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02; 0; Mismatches 3; Indels hyperproliferative disorder; cancer; bone metabolism; Alzheimer's disease; human; cell division cycle 2; ss; Seguence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other; 1031 CTGACTTTGGCCTGGCCCGA 1050 20 crearrirescerreceasa 1 BP. 02-JUL-2002; 2002US-00189266. 02-JUL-2002; 2002US-00189266. Query Match
Best Local Similarity 85.0%;
Matches 17; Conservative ADI27382 standard; DNA; 20 (first entry) (ISIS-) ISIS PHARM INC Freier SM; WPI; 2004-081741/08. US2004006029-A1 Homo sapiens 22-APR-2004 08-JAN-2004 Synthetic. ADI27382; Dean NM, RESULT 371 ADI27382/c 요 \$ \$ \$ \$ \$ \$ \$ \$ à

ö The invention relates to a compound targeted to and which specifically hybridises with a nucleic acid molecule encoding cell division cycle 2, and inhibits the expression of cell division cycle 2. The composition and methods are useful for treating a disease or condition associated with cell division cycle 2, such as hyperproliferative disorder e.g. cancer, or a disease or condition resulting from dysregulation of bone metabolism, or Alzheimer's disease. They are also useful in research and diagnostics for modulating the expression of cell division cycle 2. The present sequence represents a human cell division Gaps ; 0 0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; ative 0; Mismatches 3; Indels Sequence 20 BP; 3 A; 6 C; 2 G; 9 T; 0 U; 0 Other; 710 TCAGACTGGAACATGAAGAG 729 cycle 2 antisense oligonucleotide 20 rcagacragaagrgaagag 1 Query Match 0.9 Best Local Similarity 85.0 Matches 17; Conservative à g

Example 15; SEQ ID NO 25; 61pp; English.

disease

20 CGAGACCTCAACTCCCACAA 1

g

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The invention describes a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding LIM domain kinase 1. The compound Specifically hybridises with the nucleic acid molecule encoding LIM domain kinase 1 and inhibits the expression of LIM domain kinase 1. It precifically hybridises with at least an 8-nucleobase portion of a preferred target region on the nucleic acid molecule encoding LIM domain kinase 1. The antisense cligonucleotide is useful for modulating the expression of LIM domain kinase 1 in cells or tissues to treat diseases associated with their expression, such as a developmental disorder or a neurological disorder. In addition, the compound is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence represents a human LIM domain kinase 1 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides for modulating LIM domain kinase 1 expression, useful for diagnosing, preventing or treating conditions associated with the kinase, e.g. neurological or developmental disorders.
                                                                                                                                                                                                                                                                                                            /note= "OTHER= Phosphorothioate backbone. All cytidines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                            "mod_base= OTHER
"note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides'
                                                                                                                                                          neuroprotective; LIM domain kinase 1; developmental disorder; neurological disorder; diagnostic; prophylaxis; human; ss.
                                                                                                                             Human LIM domain kinase 1 antisense oligonucleotide #43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 2 A; 2 C; 9 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 58; 81pp; English.
                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                            L. .20
/*tag= b
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= c
/mod_base= OTHER
                                ADI38759 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2002US-00199199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JUL-2002; 2002US-00199199.
                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                              *tag≈ a
                                                                                                                                                                                                                                                                                                                                                                                                         .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-121553/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004014047-A1
                                                                                                                                                                                                                                             Key
modified_base
                                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JUL-2002;
                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-JAN-2004
                                                              ADI38759
RESULT 372
                ADI38759/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention describes a new antisense oligonuclectide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonuclectide is useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a human cyclin dependent kinase 4 antisense oligonuclectide.
                                                                                                                                                                                                                                                                                            /note= "OTHER= Phosphorothioate backbone. All cytidines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding cyclin-dependent kinase 4, useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                             /note = "OTHER = 2'-0-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                     "mod_base= OTHER
'note= "OTHER= 2'-O-Methoxyethy1 (2'-MOE) nucleotides"
                                                                                                                                           cytostatic; antidiabetic; antiinfertility; gene therapy;
cyclin-dependent kinase 4; diabetes; infertility;
hyperproliferative disorder; cancer; antisense technology; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.8e+02;
tive 0; Mismatches 3; Indels
                                                                                                                Cyclin dependent kinase 4 antisense oligonucleotide #31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 50; 90pp; English.
                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1086 GGTGGTGACACTGTGGTACC 1105
                                                                                                                                                                                                                                                                                mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                               /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 GGTTGTTACACTCTGGTACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dobie KW
                            ADI26865 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-JUL-2002; 2002US-00188779.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-JUL-2002; 2002US-00188779.
                                                                                      22-APR-2004 (first entry)
                                                                                                                                                                                                                                                 1. .20 /
/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                /*tag= c
                                                                                                                                                                                                                                                                                                                    /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                               15. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-081710/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
les 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004005567-A1
                                                                                                                                                                                                                                     Key
modified_base
                                                                                                                                                                                                                                                                                                                         modified_base
                                                                                                                                                                                                                                                                                                                                                                                 modified base
                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-JAN-2004
                                                         AD126865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
RESULT 37
ADI26865/
                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
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Query Match Best Local S

Matches

976 CGAGACCTCAAGCCCCAGAA 995

. 0

Gaps

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ch 0.9%; Score 15.2; DB 1; Length 20; l Similarity 85.0%; Pred. No. 5.8e+02; 17; Conservative 0; Mismatches 3; Indels

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ADJ64122 standard; DNA; 20
RESULT 375
           ADJ64122
                             The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonucleotide is useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a human cyclin dependent
                                                                                                                                                                                                   /mod_base= OTHER
/note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding cyclin-dependent kinase 4, useful for preparing a composition for treating diabetes, infertility or hyperproliferative
                                                                                                                                                                                                                                                                                                      note = "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                              nucleotides"
                                                                                                           cytostatic; antidiabetic; antiinfertility; gene therapy; cyclin-dependent kinase 4; diabetes; infertility; hymen; ss. hyperproliferative disorder; cancer; antisense technology; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                             /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE)
                                                                                         Cyclin dependent kinase 4 antisense oligonucleotide #181.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 200; 90pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disorder, e.g., cancer. Inis sequem
kinase 4 antisense oligonucleotide.
                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                     base= OTHER
                                                                                                                                                                                                                                                                                            base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                         Dobie KW;
                                BP.
                                                                                                                                                                                                                                                                                                                                                                02-JUL-2002; 2002US-00188779.
                                                                                                                                                                                                                                                                                                                                                                                    2002US-00188779
                                ADI27015 standard; DNA; 20
                                                                                                                                                                                           Ω
                                                                                                                                                                                                                                             ಥ
                                                                                                                                                                                                                                                                                     U
                                                                      (first entry)
                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disorder, e.g., cancer
                                                                                                                                                                                                                                                                                    /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                  . 20
                                                                                                                                                                                           /*tag=
                                                                                                                                                                                                                                                                                           /mod
                                                                                                                                                                                                                                                                                                                                                                                                                          Dean NM, Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-081710/08.
                                                                                                                                                                                                                                                                                                                         US2004005567-A1
                                                                                                                                                                                 modified base
                                                                                                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                                                                                                                   02-JUL-2002;
                                                                      22-APR-2004
                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                             08-JAN-2004
                                                    ADI27015;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
             RESULT 374
                      ADI27015
```

/mod_base= OTHER /note= "Phosphorothioate backbone where all cytidines are 5'-methylcytidines"

Location/Qualifiers

Key modified base

sapiens

Ношо

Synthetic.

Ω

*tag=

/mod_base= OTHER /note= "2'- methoxyethyl (2'-MOE) nucleotides"

base= OTHER

US2004005705-A1

08-JAN-2004

υ

/*tag=

modified base

20-JUN-2002; 2002US-00177896. 20-JUN-2002; 2002US-00177896

(ISIS-) ISIS PHARM INC.

Dobie KW;

Bennett CF,

nucleotides"

/mod_base= OTHER /note= "2'- methoxyethyl (2'-MOE) 16. .20

/*tag= a

modified base

Phospholipase D2; hyperproliferative disorder; cancer; neurodegenerative disease; Alzheimer's disease; Parkinson's disease; infection; inflammation; tumour; therapy; human; antisense; ss.

Human phospholipase D2 antisense oligonucleotide ISIS #159059.

(first entry)

06-MAY-2004

ADJ64122

BP.

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ö
                                                             New antisense compounds targeted to nucleic acid molecules encoding phospholipase D2, useful for treating diseases associated with expression of phospholipase D2, e.g. cancer, Alzheimer's disease or Parkinson's
                                                                                                                                                                                                                                                                                                                    The present invention relates to antisense oligonucleotides which are targetted to nucleic acid molecule encoding phospholipase D2 and the encoding protein. The invention is useful for inhibiting the expression of phospholipase D2 and for treating diseases and conditions associated with expression of phospholipase D2 e.g. hyperproliferative disorder such as cancer, neurodegenerative disease such as Alzheimer's disease and Parkinson's disease. The invention is also useful for therapeutic and prophylactic applications to prevent or delay infection, inflammation and tumour formation. The present sequence is human phospholipase D2 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.2; DB 1; Length 20; 15.0%; Pred. No. 5.8e+02; ve. 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 26; 46pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         740 GCACCGCCATCCGGGAAGTG 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 85.0%;
Matches 17; Conservative
WPI; 2004-081729/08.
                                                                                                                                                                                             digease.
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0;

Gaps 0

> 1086 GGTGGTGACACTGTGGTACC 1105 GGTTGTTACACTCTGGTACC 20

8

Conservative

Best Local Similarity Matches 17; Conserv

Tue Nov

(first entry)

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rantisense compounds targeted to nucleic acid molecules encoding spholipase D2, useful for treating diseases associated with expression phospholipase D2, e.g. cancer, Alzheimer's disease or Parkinson's
                                                                                                                              Phospholipase D2; hyperproliferative disorder; cancer;
neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
infection; inflammation; tumour; therapy; human; ss.
                                                                                                            Human phospholipase D2 target oligonucleotide #13.
                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 60; 46pp; English.
GCACTGCCTCCTGGAAGTG 20
                                                ADJ64156 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL00971 standard; DNA; 20 BP
                                                                                                                                                                                                                                 20-JUN-2002; 2002US-00177896.
                                                                                                                                                                                                                                                     20-JUN-2002; 2002US-00177896.
                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                WPI; 2004-081729/08.
                                                                                                                                                                                          US2004005705-A1
                                                                                                                                                                                                                                                                                                                                            phospholipase
of phospholipa
                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                          Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAY-2004
                                                                                       06-MAY-2004
                                                                                                                                                                                                            08-JAN-2004
                                                                    ADJ64156;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL00971;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                disease.
                             RESULT 376
                                       ADJ64156,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL00971,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                         & X E X B X B X B X B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
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Dobie KW;

The present invention relates to antisense oligonucleotides which are targetted to nucleic acid molecule encoding phospholipase D2 and the encoding protein. The invention is useful for inhibiting the expression of phospholipase D2 and for treating diseases and conditions associated with expression of phospholipase D2 e.g. hyperproliferative disorder such as cancer, neurodegenerative disease such as Alzheiner's disease and Parkinson's disease. The invention is also useful for therapeutic and prophylactic applications to prevent or delay infection, inflammation and tumour formation. The present sequence is human phospholipase D2 target Gaps ·. 0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; ve 0; Mismatches 3; Indels 3; Indels Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other; 740 GCACCGCCATCCGGGAAGTG 759 GCACTGCCCTCCTGGAAGTG 1 85.0%; Best Local Similarity 85.0 Matches 17; Conservative oligonucleotide

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1176 CTTCTATGAGATGGCCACAG 1195 CTTCTAGGAGATGGCTCCAG 1 20 RESULT 378 à Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #504. Human; VEGF co-regulated chemokine-1; VCC-1; (first entry)

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The invention relates to an antisense compound targeted to a nucleic acid molecule encoding human vascular endothelial growth factor (VEGF) corregulate chemokine-1 (VCC-1), and which specifically hybridises with and inhibits the expression of VCC-1. The invention also relates to a composition comprising the antisense compound, a method of inhibiting the expression of VCC-1 in clist or tissues comprising contacting the cells or tissues with the antisense compound and a method of treating a human having a disease or condition associated with VCC-1 comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         administering the antisense compound to a mainal to inhibit expression of VCC-1. The antisense compound to a mainal to inhibit expression of VCC-1. The antisense obligonucleotide comprises at least one modified comprises at least one modified sugar moiety, preferably a 2.0- methoxyethyl sugar moiety, and at least one modified nucleobase. specifically a 5-methylcytosine. The antisense oligonucleotide preferably is a chimeric oligonucleotide. The antisense compound is useful for treating a disease or condition associated with VCC-1, such as diabetes, an immunological disorder, a cardiovascular disorder, a neurological disorder, a cardion injury, cancer or an angiogenic disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1 antisense oligonucleotides may also be used for wound healing, for healing of bone fractures and cartilage damage, for regeneration of tissues or organs, for treating periodontal diseases, for gut protection or regeneration, for treatment of lung or liver fibrosis or for management of atrial fibrillation. This sequence represents an antisense
vascular endothelial growth factor; ss; antisense compound; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; antisense oligonucleotide; diabetes; immunological disorder; cardiovascular disorder; neurological disorder; ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma; tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis; fibrosis; myocardial infarction; wound healing; bone fracture;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           management of atrial fibrillation. This sequence represents an antisense oligonuclectide targeted to DNA encoding the human VCC-1 polypeptide of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compounds targeted to a nucleic acid molecule encoding vascular endochalial growth factor co-regulated chemokine-1 (VCC-1), useful for treating VCC-1-associated disorders, e.g. diabetes or a neurologic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
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0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                  cartilage damage; tissue regeneration; organ regeneration; periodontal disease; gut regeneration; atrial fibrillation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 4; SEQ ID NO 504; 336pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                               19-AUG-2003; 2003WO-US025891.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-AUG-2002; 2002US-0404484P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-192065/18.
                                                                                                                                                                                                                                                                                                            WO2004016224-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the invention.
                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Weinstein EJ;
                                                                                                                                                                                                                                                                                                                                                            26-FEB-2004
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vascular endothelial growth factor; ss; antisense compound; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; sheethylosuelenidar moiety; is—methylotybosine, antisense oligonucleotide; diabetes; immunological disorder; cardiovascular disorder; neurological disorder; tamoura ngiogenesis; reperfusion injury; cancer; angiogenic disorder; haemangioma; tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis; fibrosis; myocardial infarction; wound healing; bone fracture; cartilage damage; tissue regeneration; organ regeneration; periodontal disease; gut regeneration; atrial fibrillation.
                                                                                                                                                                                                                          Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #625.
                                                                                                                                                                                                                                                                                        VEGF co-regulated chemokine-1; VCC-1;
                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-AUG-2003; 2003WO-US025891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-AUG-2002; 2002US-0404484P
                                   ADL01092 standard; DNA; 20
                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-192065/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       neurologic disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2004016224-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Weinstein EJ;
                                                                                                                                                               20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-FEB-2004.
                                                                                                     ADL01092;
ADLO10092/c
TD ADLO100
XX
AC ADLO10
XX
AC ADLO10
XX
XX
ADLO10
XX
ADLO10
XX
Human
XX
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The invention relates to an antisense compound targeted to a nucleic acid molecule encoding human vascular endothelial growth factor (VEGF) coregulated chemokine—I (VCC-1), and which specifically hybridises with and inhibits the expression of VCC-1. The invention also relates to a composition comprising the antisense compound, a method of inhibiting the expression of VCC-1 in cells or tissues compound and a method of treating the cells or tissues with the antisense compound and a method of treating a human carried antisense compound to an animal to inhibit expression of VCC-1. The antisense compound to an animal to inhibit expression of VCC-1. The antisense oligonucleotide comprises at least one modified comprises at least one modified sugar moiety, preferably a 2'-0-comprises at least one modified sugar moiety, preferably a 2'-0-comprises at least one modified sugar moiety, preferably a 2'-0-comprises at least one modified modified mucleobase, specifically a 5-methylcytosine. The antisense oligonucleotide preferably is a chimeric oligonucleotide. The antisense compound is useful for treating a disease or condition associated with VCC-1, such as diabetes, an immunological disorder, a cardiovascular disorder, a neurological disorder, a cardiovascular disorder, a neurological disorder, encouraged or shearmalon injury, cancer or an angiogenic abbrevial and a shearming a shearming or standard or shearming or shearmi atheroscierosis, psoriasis or fibrosis after myocardial infarction. VCC-1 antisense oligonucleotides may also be used for wound healing, for healing of bone fractures and cartilage damage, for regeneration of or regeneration, for treatment of lung or liver fibrosis or for management of atrial fibrillation. This sequence represents an antisense oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of tissues or organs, for treating periodontal diseases, for gut protection New antisense compounds targeted to a nucleic acid molecule encoding vascular endothelial growth factor co-regulated chemokine-1 (VCC-1), useful for treating VCC-1-associated disorders, e.g. diabetes or a Claim 4; SEQ ID NO 625; 336pp; English.

Seguence 20 BP; 5 A, 7 C; 4 G; 4 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Culturing a porcine pluripotent cell for establishing pluripotent/totipotent porcine cell lines, comprises culturing the porcine pluripotent cell in the presence of STO8 feeder cells expressing porcine stem cell factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention describes a method for culturing a porcine pluripotent cell, comprising culturing a porcine pluripotent cell in the presence of STOB feeder cells which express a porcine stem cell factor. The porcine stem cell factor is in membrane-bound form. The method is useful for establishing pluripotent or totipotent porcine cell lines. The present sequence represents a PCR primer used to clone porcine stem cell factor (pSCF), also known as porcine 'steel' factor.
                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                           ;
0
                                                                                                                                                                                                                                                             ss; porcine pluripotent cell; porcine stem cell factor; pSCF; porcine steel factor; primer; PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 15.2; DB 1; Length 20;
15.0%; Pred. No. 5.8e+02;
ve 0; Mismatches 3; Indels
Length 20;
                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
0.9%; Score 15.2; DB 1;
85.0%; Pred. No. 5.8e+02;
iive 0; Mismatches 3;
                                                                                                                                                                                                                                         Porcine stem cell factor (pSCF), PCR primer #6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primer of the invention SEQ ID NO:11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 4; SEQ ID NO 11; 38pp; English.
                                                         1177 TICTATGAGATGGCCACAGG 1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               424 ATGCGCAACCATCCCCCACG 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TICIAGGAGATGGCTCCAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                        98US-00133352.
                                                                                                                                                                                                                                                                                                                                                                                              98US-00133352.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 85.0%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADM11113 standard; DNA; 20
                                                                                                                                                         ADL09179 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BIOT-) BIOTRANSPLANT INC.
                              17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Baetscher M, Brem G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-292803/27.
               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                              13-AUG-1998;
                                                                                                                                                                                                                                                                                                                                       US6703209-B1
                                                                                                                                                                                                                                                                                                                                                                                                                         13-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                    09-MAR-2004.
                                                                                                                                                                                                              20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADM11113;
                                                                                                                                                                                    ADL09179;
                                                                                     20
    Query Match
                                                                                                                                                                                                                                                                                                              Sus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 380
                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADM11113,
                                                                                                                                            ADL:09179
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                                                                                                                                                         셤
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The invention relates to a novel method for nucleic acid amplification, in which polymerase chain reaction (PCR) is carried out in the presence of the RecA recombinase protein of Thermophilus and/or of a protein with similar activity obtained by modification of its sequence. The method is useful for detection of single nucleotide polymorphisms (SNP). Addition of the RecA recombinase inhibits amplification of PCR by-products such as those caused by polymerase misreading and allows PCR from small amounts of template to be used for detection of SNP with high
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; antiinflammatory; neuroprotective; nautionflammatory; neuroprotective; vasotropic; ophthalmological; neuroprotective; nautionflammation; Alzheimer's disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; s.
                                                                                                                                                                                                                                                                                                                                                                                                Amplification of nucleic acids in the presence of RecA protein for accurate detection of single nucleotide polymorphisms with inhibition of by-product amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The sequences shown in ADM11103-ADM11234 represent PCR primers
                ss; primer; PCR; RecA; recombinase; protein; Thermus thermophilus; single nucleotide polymorphisms; SNP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:242.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         used to illustrate the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; SEQ ID NO 11; 172pp; Japanese.
                                                                                                                                                                                                                                                                                                                            Mikawa T,
                                                                                                                                                                                                                                                    (AISI-) AISIN COSMOS R & D CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        499 CTGCCTGAGGCTACCTGGA 518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGCTTGGGGGCCACCTGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADM14055 standard; DNA; 20 BP
                                                                                                                                                                                                                  17-SEP-2002; 2002JP-00269645.
                                                                                                                                                                               12-SEP-2003; 2003WO-JP011752
                                                                                                                                                                                                                                                                       (RIKE ) RIKEN KK.
(KAZU-) KAZUSA DNA RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                          Shigemori Y, Shibata T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17; Conservative
                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-295419/27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                       WO2004027060-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUL-2004
                                                                                                                                           01-APR-2004
                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          accuracy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
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                                                                                                                                                                                                                                                                     RIKE )
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ADM14055/c
δ
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Ohara O;

Oishi M,

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The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9434.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (3) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. MPGES-1 chimeric antisense oligonucleotides and antisense compounds have oytostatic, antidiabetic, immunomodulator, cardiant, neuroprotective, neuroprotective, neuroprotective, neuroprotective, antishing disease or computating a disease or can be used for preparing a omposition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                     /mod_base= OTHER
/note= "phosphorothioate linkages and all cytidine
residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
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85.0%; Pred. No. 5.8e+02;
ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                         /*tag= a
/mod_base= OTHER
/note= "2'-0-methocyethyls"
16..20
                                                                                                                                                                                                                 /mod_base= OTHER
/note= "2'-0-methoxyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 4; SEQ ID NO 242; 132pp; English.
 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 Grégochacchéegaager 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           505 GAGGCTACCTGGAGAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                               25-SEP-2003; 2003WO-US030374.
                                                                                                                                                                                                                                                                                                                                                                                     25-SEP-2002; 2002US-0413549P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADN31409 standard; DNA; 20
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                                  *tag= b
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Matches 17; Conservative
                                                                                                                                                                                                    *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                     (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-305094/28.
                                                                                                                                                                                                                                                                        WO2004028458-A2
Key
modified_base
                                                                                                        modified_base
                                                                                                                                                                                 modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADN31409
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Gaps

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(first entry)

12-AUG-2004

Human forkhead box C2 antisense oligonucleotide ISIS227189.

Location/Qualifiers

. 20

/*tag= b /mod_base= OTHER

/mod_base= OTHER /note= "2'-methoxyethyl residue"

/*tag= a

/note= "2'-methoxyethyl residue"

base= OTHER

/mod

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16. .20 /*tag=

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The invention relates to a new compound 8-80 nucleobases in length (an antisense oligonucleotide) targeted to a nucleic acid molecule encoding forkhead box C2, where the compound specifically hybridises with the nucleic acid molecule encoding human forkhead box C2 appearing as appainant in the expression of forkhead box C2. Also included are inhibiting the expression of forkhead box C2 in cells or tissues, screening for a modulator of forkhead box C2, a diagnostic method for screening for a modulator of forkhead box C2, a diagnostic method for compound and treating an animal having a disease or condition associated with forkhead box C2. The compound and methods are useful in diagnosing and treating developmental disorders e.g. lympoedemas such as lympoedema distichiasis, dysgeneses of the mouse iridocorneal angle similar to those seen in human Axenfeld-Rieger anomaly and congenitation associated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          present sequence is an antisense oligonucleotide targeting forkhead box
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New compound targeted to a nucleic acid molecule encoding forkhead box C2, useful in diagnosing and treating developmental disorder.
                                        Human; ss; antisense; forkhead box C2; developmental disorder;
lympoedema; lympoedema-distichiasis; dysgenesis; iridocorneal angle;
Axenfeld-Rieger anomaly; congenital glaucoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 74; 80pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-NOV-2002; 2002US-00303635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-NOV-2002; 2002US-00303635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-399740/37.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                       US2004102621-A1
                                                                                                                                               Key
modified_base
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                                                                                                                                                                                                                                           modified base
                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 383
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ID AD055
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides for modulating never in mitosis, gene a (NIMA)-related kinase 6 expression, useful for diagnosing, preventing ctreating diseases associated with the kinase, e.g. hyperproliferative
                                                                                                                                                                                                                                                                                    /mod_base= OTHER /mod_base= OTHER /note= "This oligonuclectide has a phosphorothicate backbone and 2'-methyoxyethyl (2'-MOE) wings at the 5' and 3' ends, which are 5 nucleotides in length at each end. All cytidine residues are 5-methylcytidines"
                                                                                                                    Antisense therapy; human; NIMA-related kinase 6;
never in mitosis gene a-related kinase 6; hyperproliferative disorder;
cancer; cytostatic; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hyperproliferative disorders, e.g. cancer. The present sequence represents an antisense oligonucleotide used in the examples of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotides are useful for the treatment of diseases such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
                                                                                   Human NIMA-related kinase 6 DNA, antisense oligonucleotide #27
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0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 41; Slpp; English
                                                                                                                                                                                                                                  Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-NOV-2002; 2002US-00295471.
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                                                   (first entry)
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/*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                      US2004097441-A1
                                                                                                                                                                                                                                      Key
modified_base
                                                                                                                                                                                                    sapiens
                                                 12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50
                 ADO55804;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dobie KW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 384
                                                                                                                                                                                                      Homo
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                                                                                                                                                                                                                                      /note= "Phosphorothioate backbone and all cytidines are 5 -methylcytidines"
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Gaps

0

3; Indels

0; Mismatches

17; Conservative

GGCAGCTGTCAATGACACTC 168

20

GGCAGCTGGCATTGCCACTC

Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02;

0.98;

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Oligo-nucleotide(s) for modulating effects of cytomegalovirus infections - which can be hybridised with portion of RNA or DNA derived from IE1, IE2 or DNA genes of cytomegalovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The oligonucleotide was synthesised to be complementary to the IE2 NUC SIG 2 of human cytomegalovirus. This site is known to control mRNA stability, processing and/or translational efficiency. The synthetic oligomer can hybridise to the native DNA polymerase of cytomegalovirus and modulate the activity of CMV. The oligomer can be used prophylactically or therapeutically to reduce the severity of disease caused by CMV. It specifically inhibits replication of CMV by antisense inhibition of gene expression. See also AAQ22353-400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligo-nucleotide(s) for modulating effects of cytomegalovirus infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IE2; DNA polymerase; CMV; prophylactic; therapeutic; sense inhibition; gene expression; intron/exon boundary; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA for modulating effects of cytomegalovirus infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.9%; Score 15.2; DB 1
85.0%; Pred. No. 6e+02;
ative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Table 2; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 CGGATGAAGAAGATCAAACG 149
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                                                                                                                                          91WO-U0005815.
                                                                                                                                                                                   90US-00568366
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ22372 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-JUL-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 0.99
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                     Draper KG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Draper KG;
                                                                                                                                                                                                                            PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                          WPI; 1992-096819/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1992-096819/12
                 Cytomegalovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cytomegalovirus.
                                                                                                                                                                                                                                                                   Anderson KP,
                                                                                                                                                                                                                          SISI (-SISI)
                                                                                                                                          14-AUG-1991;
                                                                                                                                                                                 16-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anderson KP,
                                                        WO9203456-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-MAR-1992.
                                                                                                 05-MAR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09203456-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ22372;
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à
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides for modulating never in mitosis, gene a (NIMA)-related kinase 6 expression, useful for diagnosing, preventing or treating diseases associated with the kinase, e.g. hyperproliferative
                                                                                                                               Antisense therapy; human; NIMA-related kinase 6;
never in mitosis gene a-related kinase 6; hyperproliferative disorder;
cancer; cytostatic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IE1; IE2; DNA polymerase; CMV; prophylactic; therapeutic;
antisense inhibition; gene expression; intron/exon boundary; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA for modulating effects of cytomegalovirus infection
                                                                                          Human NIMA-related kinase 6 DNA target sequence #20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 112; 51pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     967 GIGCTACACCGAGACCICAA 986
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                                                                                                                                                                                                                                                                                                                                                                                        16-NOV-2002; 2002US-00295471.
                                                                                                                                                                                                                                                                                                                                                   2002US-00295471.
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AAQ22395 standard; DNA; 21
                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-389184/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                             JS2004097441-Al
                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                               16-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                 SISI (-SISI)
                                                      12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-JUL-1992
                                                                                                                                                                                                                                                                                                        20-MAY-2004
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               AD055866;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ22395;
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25-JAN-1993;
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13-MAR-1996
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                                                                                                                                                                                                                                                                                                                                                                                       US5442049-A
                                                                                                                                                                                                                                                                                                                                                                                                               15-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                          AAT12031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Baker B,
                                                                                                                                                                                              RESULT 388
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Matches
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                                                       The oligonucleotide was synthesised to be complementary to the IEZ NUC SIG-2 region of human cytomegalovirus. This site is known to control mRNA stability, processing and/or translational efficiency. The synthetic oligomer can hybridise to the native DNA polymerase of cytomegalovirus and modulate the activity of CMV. The oligomer can be used prophylactically or therapeutically to reduce the severity of disease caused by CMV. It specifically inhibits replication of CMV by antisense inhibition of gene expression. See also AAQ22353-400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New oligo-nucleotide inhibits cytomegalovirus replication - by binding to a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of CMV diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This is a claimed antisense oligonucleotide (ON) which when tested for activity against cytomegalovirus (CMY) showed greater than 90% inhibition of virus at a concentration of 5 microm. The target of this ON is nucleotides 170120-141 of the intermediate early 2 (IE2) nuclear localisation signal 2 of the human CMY genome. Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA polymerase proteins have been shown to be effective in therapy, prophylaxis and diagnosis of CMV
                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis; intermediate early complex; IB1; IB2; DNA polymerase gene; ss.
 - which can be hybridised with portion of RNA or DNA derived from IE1. IE2 or DNA genes of cytomegalovirus.
                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                Antisense oligonucleotide (ISIS 2922) complementary to human CMV
                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                             0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                    3; Indels
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/note= "phosphorothioate backbone"
                                                                                                                                                                     Seguence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Col 13-14; 66pp; English
                                                                                                                                                                                                                                            130 CGGATGAAGAAGATCAAACG 149
                                     Claim 11; Page 36; 44pp; English
                                                                                                                                                                                                                                                                  cechagaagaagaagaaga 20
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                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                      17; Conservative
                                                                                                                                                                                                                                                                                                                                AAT11965 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                              (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Baker B, Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1995-292538/38.
                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-NOV-1992;
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13-MAR-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New oligo-nucleotide inhibits cytomegalovirus replication - by binding to a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of CMV diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        diagnosis;
infection. The ONs may be modified to reduce nuclease resistance and increase their efficacy. Modifications include phosphorothioate backbones, alkyl and halogen- substituted sugar moities at the 2' position. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CMV IE2 target gene sequence for antisense oligonucleotides.
                                                                                                                                                                                                                                     0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                         Indels
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                                                                                                                                                                       Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                         3;
                                                                                                                                                                                                                                                                                                      0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                          130 CGGATGAAGAAGATCAAACG 149
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                                                                                                                                                                                                                                                                                                                                                                                                                       21 CGCAAGAAGAAGAAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93US-00009263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT12031 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
(first entry)
                                                                                                                                                                                                                                            Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1995-292538/38
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Best Local Similarity
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AAT01703 standard; DNA; 21 BP.

RESULT 390 **AAT01703**

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New oligomers are claimed which (A) have at least one peptide nucleic acid (PRA) subunit and (B) have a sequence hybridisable to AUG region, 5 untranslated region, intron/exon (I/E) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a papillomavirus The PNAs can be used to target RNA and single stranded DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary is shall be stranded DNA. They are also able to form triple helices in which a first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand binds callular uptakes. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by proteases. The present sequence targets CWV IE2 nuclear localization
                                                                                                                                                                                                                                                                                                                                 /*tag= a //note= "at least one (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                            peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
antiviral; diagnostic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.9%; Score 15.2; DB 1; Length 21;
35.0%; Pred. No. 6e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ecker DJ,
                                                                                                                                                      Peptide nucleic acid targetting CMV IE2 nuc sig 2.
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                                                                                                                                                                                                                                                                                                                                                                                                           to a polyamide backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mirabelli CK,
                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 2; Page 43; 65pp; English.
                                    AAT01647 standard, DNA; 21 BP.
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                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                               *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PHARM INC
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                                                                                                                                                                                                                                                                                                           misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9504748-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-AUG-1993;
                                                                                                                17-DEC-1995
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                                                                                                                                                                                                                                                   Synthetic
                                                                          AAT01647;
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                                                                                                                                                                                          peptide
RESULT 389
                  AAT01647,
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New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5' untranslated region, intron/exon (I/E) junction or coding sequence of cytomegalorius gene selected from DNA polymerase. IE1 and IE2, or hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (SSDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the first PNA strand binds with the first PNA strand binds with the first PNA strand could be helic or with the first PNA strand binds and are water soluble, which facilitates cellular uptake. Futher, since they contain amides of non-biological amine acids, they are biostable and resistant to enzymatic degradation by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                       /*tag= a /note= "at least one (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently to a polyamide backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     to enzymatic degradation by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus – are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protesses. The present sequence targets CMV IE2 nuclear localisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                   peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus; antiviral; diagnostic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cowsert LM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mirabelli CK, Ecker DJ,
                                                                                                             Peptide nucleic acid targetting CMV IE2 nuc sig 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                               Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94WO-US009039.
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                                                                         (first entry)
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Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
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                                                                       17-DEC-1995
                                                                                                                                                                                                                                                                 misc feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                           16-FEB-1995.
                                                                                                                                                                                                         Synthetic.
                                   AAT01703;
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Gaps

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130 CGGATGAAGAAGATCAAACG 149

82.08;

17; Conservative

Local Similarity

Best Loc Matches

CGCAAGAAGAAGAGCAAACG 2

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(NOVS ) NOVARTIS AG.
                                                                                                                                                                                                                  CMV infection.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-FEB-1997;
                                WO9532213-A1
                                                                              9-MAY-1995;
                                                                                                     25-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-AUG-1997
                                                       30-NOV-1995
          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX36470;
                                                                                                                                                 Pari GS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 393
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                                                                                                                                                                                                                                                                                                                                                                                                               This sequence represents an antisense oligonuclectide ISIS 2922 which is targetted to the cytomegalovirus (CMV) immediate early 2 (IE2) mRNA. The IE2 protein is capable of transcriptionally activating proteins of cellular and viral origin and is thought to be one of the "master switches" of human CMV (HGNM) gene expression. Therefore disruption of the IE2 mRNA will lead to a reduction in HGNV infectivity. This oilgonucleotide may esp. be used in a human medicine to halt progression of CMV retinitis which can cause blindness in immunocompromised, e.g. HIV, patients: It has an additive effect with ganciclovir or foscarnet, and is not adversely affected by AZT or ddC
                                                                                                                         Antisense oligonucleotide; ISIS 2922; cytomegalovirus; CMV; immediate early 2 mRNA; IE2; human; HCMV; CMV retinitis; blindness; HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inhibitor; cytomegalovirus; human; antisense oligonucleotide; HCMV; regulatory profein; general transcriptional activator; DNA replication; orilyt-dependent viral replication; phosphorochioate linkage; CMV; IE2; 2-0-methyl linkage; alkylphosphonate linkage; replication deficient;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                           Anti-sense oligo-nucleotide against the CMV immediate early 2 gene useful for treatment of cytomegalovirus infections, esp. retinitis.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                      Antisense oligonucleotide ISIS 2922 targetted to CMV IE2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IE2 translational start inhibitor IE (ISIS).
                                                                                                                                                                                                                                                                                                                Kisner DL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 24; 32pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                  AAT05682 standard; DNA; 21 BP.
                                                                                                                                                                                                                                          95WO-US005007
                                                                                                                                                                                                                                                                  94US-00233711
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                06-JUN-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 85.v.
To 17; Conservative
                                                                                                                                                                                                                                                                                                               Chapman SK,
                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immediate early; ss
                                                                                                                                                                                                                                                                                                                                       WPI; 1995-382835/49
                                                                                                                                                                                                                                                                   26-APR-1994;
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                                                                                                                                                                                               WO9528941-A1
                                                                                                                                                                                                                                            24-APR-1995;
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                                                                                                                                                                                                                                                                                                                Draper KG,
                                                                                                                                                                         Synthetic.
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                                                         AAT05682,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 392
AATO7112/c
LD AATO7112/X
AC AATO7112
XX
XX
XX
DT 25-UUN
XX
XX
DE IE2 trx
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XW Inhibit
XW regulat
XW regulat
XW regulat
XW or-inyt
            RESULT 391
                         AAT05682/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RNaseH; RNA cleavage; DNA cleavage; hybridisation; protein kinase C gene; gene expression modulation; ras; raf; therapy; AIDS; atherosclerosis; infection; cell growth; ss.
                                                                                                                                                                                                                                                                                                                                                      Synthetic oligo:nucleotide(s) that hybridise to cytomegalovirus (CMV) DNA inhibit CMV gene expression, useful for treating or preventing human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chimeric 2'-0-methyl oligo for CMV replication inhibition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 23; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 CGCAAGAAGAAGAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97WO-US002043.
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95WO-US006160
                                                                       94US-00249386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX36470 standard; DNA; 21
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                                                                                                                                               (HYBR-) HYBRIDON INC
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Oligo:nucleotide with RNaseH activity, which specifically hybridises to
                                                                                                                                              the 2'-0-CH2-CH2-0-CH3 sugar moiety
                                              Example 22; Page 47; 86pp; English
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                                                                                                                                                                        82.08;
                                                                                                                                                                                                                             AAX36471 standard; DNA; 21
                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                              Query Match
Best Local Similarity 85.0%
                                                                                                                                                                                                                                                                                                                                             PHARM INC.
                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM I
(NOVS ) NOVARTIS AG.
              WPI; 1997-424968/39
    Monia B,
                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-424968/39
                                                                                                                                                                                                                                                                                                                        07-FEB-1997;
                                                                                                                                                                                                                                                                                                                                  14-FEB-1996;
                                                                                                                                                                                                                                                06-JUL-1999
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                                                                                                                                                                                                                                                                                          Synthetic.
    Cook PD,
                                                                                                                                                                                                                  RESULT 394
AAX36471/c
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Location/Qualifiers Example 22; Page 47; 86pp; English. 130 CGGATGAAGAAGATCAAACG 149 21 CGCAAGAAGAAGAACG 2 AAT49210 standard; DNA; 21 BP 96WO-US008757 85.0%; (first entry) Query Match
Best Local Similarity 85.05
Marches 17; Conservative (revised) Key modified_base WO9639154-A1 05-JUN-1996; 06-JUN-1995; 06-JUN-1995; 02-JUL-2002 06-JUN-1995; 03-SEP-1997 12-DEC-1996 Synthetic AAT49210; RESULT 395 AAT49210/ HHXXXXDDDDDDDDDDDDDXXXX ð Op .; 0 or phosphorothicate linkages, comprising a first subsequence having 2.-0-CH3 sugar moieties and a second subsequence having 2.-0-CH3 sugar moieties and a second subsequence having 2.-deoxy sugar moieties. (A), which has RhaseH activity for cleaving a complementary strand, can be used to modulate the expression of ras, raf and protein kinase C genes, useful in the therapy of AIDS, atherosclerosis, bacterial or other infections, or to control aberrant cell growth in humans, animals or plants. (A) can also be used diagnostically, particularly when labelled, to detect overexpression of mRNA or expression of abnormal RNA, including imaging of tissue sections, and as a research reagent. (A) has increased binding affinity for complementary strands (attributable to the 2'-O-CH2-CH3 sugar moiety, which overcomes the loss of affinity caused by altered intersugar links), and increased resistance to nuclease (from the modified links and Oligo:nucleotide with RNaseH activity, which specifically hybridises to DNA or RNA - comprises 1st and 2nd sub:sequence(s) having 2'-O-CH2-CH2-O-CH3 and 2'-deoxy sugar moleties, useful for therapy or diagnosis. RNaseH; RNA cleavage; DNA cleavage; hybridisation; protein kinase C gene; gene expression modulation; ras; raf; therapy; AIDS; atherosclerosis; infection; cell growth; ss. This sequence is an example of an oligonucleotide of the invention, and is an inhibitor of CMV replication. The invention relates to oligonucleotides (A), which specifically hybridises to RNA or DNA, comprises a linear sequence of nucleotide units linked by phosphodiester Gaps ö 0.9%; Score 15.2; DB 1; Length 21; Chimeric 2'-0-methyl oligo for CMV replication inhibition. 3; Indels Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other; Pred. No. 6e+02; 0; Mismatches Martin P; Martin P; 130 CGGATGAAGAAGATCAAACG 149 Altmann K, CGCAAGAAGAAGAGCAAACG BP. 97WO-US002043. 96US-0011620P

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This sequence is an example of an oligonucleotide of the invention, and is an inhibitor of CMV replication. The invention relates to oligonucleotides (A), which specifically hybridises to RNA or DNA, comprises a linear sequence of molectide units linked by phosphodister or phosphorothicate linkages, comprising a first subsequence having 2'-0-CH2-O-CH3 sugar moieties and a second subsequence having 2'-deoxy cugar moieties. (A), which has RNaseH activity for cleaving a complementary strand, can be used to modulate the expression of ras, raf and protein kinase C genes, useful in the therapy of AIDS, atherosclerosis, bacterial or other infections, or to control aberrant cell growth in humans, animals or plants. (A) can also be used diagnostically, particularly when labelled, to detect overexpression of mRNA or expression of abnormal RNA, including imaging of tissue sections, and as a research reagent. (A) has increased binding affinity for complementary strands (attributable to the 2'-O-CH2-CH2-O-CH3 sugar moiety, which overcomes the loss of affinity caused by altered intersugar links), and increased resistance to nuclease (from the modified links and the 2'-O-CH2-CH2-O-CH3 sugar moiety)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;·
DNA or RNA - comprises 1st and 2nd sub:sequence(s) having 2'-O-CH2-CH2-O-CH3 and 2'-deoxy sugar moieties, useful for therapy or diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       phosphorothioate; therapeutic; RNase H activity; ras; antisense; inhibit translation; treating; heparitis; inflammatory disease; interecellular cell adhesion factor; ICAM-1; cytomegalovirus retinitis; cancer; protein kinase C alpha; c-raf; Ha.ras; Ki-ras; AIDS; chiral; thermodynamic stability; hepatitis C virus; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 15.2; DB 1; Length 21; 55.0%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= a
/note= "phosphorothioate 3' to 5' linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Phosphorothioate oligonucleotide ISIS-2922.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95US-00466692.
95US-00467597.
95US-00468447.
95US-00468569.
95US-00470129.
95US-00471966.
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06-JUN-1995;
06-JUN-1995;
06-JUN-1995;
06-JUN-1995;
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prevent human cytomegalovirus infections.
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                                                                                                                                    AAT49204-14 are oligonucleotides where at least 75 % of the nucleoside units are joined together by Sp or Rp phosphorothioate 3' to 5' linkages. The oligonucleotides are useful therapeutically, e.g. by eliciting Rwase H activity ras antisonse molecules to inhibit translation. Uses of the oligos include treating hepatitis, inflammatory diseases mediated by intercellular cell adhesion factor ICAM-1 and cytomegalovirus retinitis, as well as treatment of cancers mediated by protein kinase C alpha, c-raf kinase, Ha-ras or Ki-ras and treating AIDS. The sequence-specific phosphorothicate oligonucleotides have substantially chirally pure intereugar linkages which increase the thermodynamic stability of heteroduplexes with target RNA and DNA. The present sequence is used in the treatment of cytomegalovirus retinitis. (Updated on 02-UUL-2002 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Modified oligo; nucleotide(s) with antiviral activity - used to treat or
                                                                        Sequence-specific oligo:nucleotide(s) useful in anti-sense therapy -contain phosphoro:thioate linkages of high chiral purity, also used to induce RNase H activity.
                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, cytomegalovirus, infection, antiviral, CMV, diagnosis, chemical modification; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                           0.9%; Score 15.2; DB 1; Length 21;
35.0%; Pred. No. 6e+02;
lve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anti-cytomegalovirus activity oligonucleotide ISIS 2922.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
/note= "Phosphorothioate linkages"
                                                                                                                                                                                                                                                                                        Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                       130 CGGATGAAGAAGATCAAACG 149
                                                                                                                    Claim 1; Page 22; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                  21 CGCAAGAAGAAGAGCAAACG 2
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                                                                                                                                                                                                                                                                                                                       82.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-APR-1998 (first entry)
                                                                                                                                                                                                                                                                                                            Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
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             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                    add missing PA field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-479898/44
                                                      WPI; 1997-042838/04
                                 Cook PD, Hoke G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
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                                          The present sequence represents a chemically modified oligonucleotide with antiviral activity against human cytomegalovirus (CMV). The chemically modified oligonucleotide is targeted to the Ui36/37 gene of CWW, and is used to treat or prevent human CMV infections. Also, the chemically modified oligonucleotide can be used as a diagnostic probe to detect CMV in clinical and experimental samples. Compared with known anti-CMV antisense molecules the chemically modified oligonucleotide is more active, and more stable in vivo (allowing reduction in dose or less frequent administration). It has better bioavallability to target organs and tissues, and is less toxic (in trials, humans tolerated 2 hour infusion of 0.5 mg/kg without toxicity)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New oligo:nucleotide(s) for inhibiting transcription of hepatitis C virus RNA - contain diastereomerically pure phosphoro:thioate links for formation of more stable complexes with target nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT51073-T51079 represent inhibitors of the invention. This sequence can be used in the treatment of cytomegalovirus retinitis. 75-100 % of the nucleotides in these sequences are preferably joined by either Sp or Rp phosphorothicate 3' to 5' links. To create these sequences, 2'-deoxyribonucleoside-5'-0-(1-hiophosphate) (dNTPalphas) is prepared as a racemic mixture, and the pure Sp and Rp diastereomers are isolated (such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RNA transcription inhibitor; hepatitis C virus; HCV; inflammation; AIDS; phosphorothicate oligonucleotide; primer; nuclease; RNaseH; therapy; thermodynamic stability; cytomegalovirus infection; cancer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
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Disclosure; Page 7; 31pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 CGGATGAAGAAGATCAAACG 149
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93US-00058023.
94US-00297703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1997-011289/01.
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Best Local Similarity
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05-MAY-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAR-2003
13-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-AUG-1994;
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as by reverse-phase HPLC on ODS Hypersil). The chiral products are then used to make these sequences enzymatically in the presence of a template, primer, and muclases. Alternatively these sequences can be chemically synthesized. Oligomocleotides with Chirally pure intersugar links form heteroduplexes with target RNA or DNA of greater thermodynamic stability formpared with racemic mixtures), and elicit RNAsed activity. Chirally pure oligomocleotides also have a better resistance to nuclease digestion. As these sequences inhibit HCV RNA transcription, they can be used as therapeutic, diagnostic, and research agents. More generally, chirally pure phosphorothicate oligomocleotides can be used as therapeutic agents in the same way as racemic (or non-sulphur substituted) compounds, such as to treat ADDS, inflammation, such as to treat ADDS, inflammation, cytomegalovirus infection, and various cancers. (Updated on 25-MAR-2003 Inhibiting restenosis using oligonuclectide binding to cytomegalovirus nucleic acid - useful for, e.g. preventing cytomegalovirus replication particularly after angioplasty or atherectomy. CMV; human; cytomegalovirus; restenosis; angioplasty; atherectomy; hybridisation; probe; oligomeric molecule; morpholino; HMCV; /*tag= a /note= "preferably phosphoramidate linkages" 0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other; CMV; human; cytomegalovirus; restenosis; gene oligomeric molecule probe #1. Location/Qualifiers 130 CGGATGAAGAAGATCAAACG 149 N Claim 8; Page 15; 24pp; English. 21 CGCAAGAGAGAGCAAACG 97US-0043274P. 98WO-US007866. AAV70321 standard; DNA; 21 (first entry) 17; Conservative (ANTI-) ANTIVIRALS INC to correct PF field.) Similarity Human herpesvirus 5. phosphoramidate; ss. WPI; 1998-594572/50. Key modified_base 16-APR-1998; 05-FEB-1999 WO9846740-A1 17-APR-1997; 22-OCT-1998 Synthetic AAV70321; Query Match Best Local Best Loc Matches Ç. AAV70321 g

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Gaps

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pyrimidine bases that hybridise to corresponding bases in the target, connected by 5-7 atom cyclic backbone groups. The oligomucleotides are used to inhibit CWV replication, which is implicated in proliferation of smooth muscle cells. They are particularly administered at the site of injury but oral and parental administration are also contemplated. Typically the dose is 1-25 (preferably 2-15) micro mole, or when included in a delivery device, 30-3000 (preferably 300-1500) micro g/cm2 of surface area being treated. Compared with sugar-based oligomucleotides, the oligomucleotides of the present invention have higher affinity for target RNA and better resistance to nucleases. Also the target. Coligomucleotide duplex formed is not unwound in the cell and since the oligomucleotides are uncharged they enter cells more easily. Delivering the oligomucleotides from balloon catherers or stents provides a high contestration at the target site. AAV70312 represent
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Detection of galactokinase mutations - based on comparison with wild-type gene sequence or altered galactokinase activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human galactokinase. This protein is used in a method to detect galactokinase mutations. This protein and its encoding nucleic acid can be used in methods allowing the detection, diagnosis and treatment of
                                                                                                                                                                                                                                               specifically claimed examples of the oligonucleotides from the present
                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAV62907-V62927 are PCR primers used in the amplification of a novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Galactokinase; human; mutation; detection; diagnosis; treatment;
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                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                    Score 15.2; DB 1
Pred. No. 6e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human galactokinase cDNA PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Col 35-36; 31pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                      130 CGGATGAAGAAGATCAAACG 149
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                                                                                                                                                                                                                                                                                                                                   0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV62909 standard; DNA; 21 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           deficiency: PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-MAY-1995;
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                                                                                                                                                                                                                                                                   invention
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0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02;

Query Match Best Local Similarity

The present invention describes a method for inhibiting restenosis, in subject infected with cycomegalovirus (CMV) who has undergone, or is undergoing, angioplasty or atherectomy. The method comprises administering an oligonucleotide that hybridises to at least part of a target sequence in a CMV gene. The oligonucleotide comprises purine and

Sequence 21 BP; 3 A; 9 C; 7 G; 2 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                           AAV28155-268 represent oligonucleotides which can be purified using the method of the invention. The specification describes a matrix that comprises a support and an affinity unit that specifically and reversibly binds a target oligonucleotide, and comprises a sequence of bases having the reverse complement of a hybridising portion of the target oligonucleotide. The matrix is used for affinity purification of synthetic oligonucleotides, specifically antisense agents, for treatment of hyperproliferative diseases, e.g. Alzheimer's for modulating expression of cell surface proteins, and to inhibit a eukaryotic pathogen,
                                                                                                                                                            Purification, oligonucleotide, matrix, affinity unit, Cytomegalovirus, affinity purification, antisense, influenza virus, CMV, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
Gaps
                                                                                                                                                                                                                                                                                                                                                   Matrix for selective separation of oligo:nucleotide - useful for, large scale purification of anti-sense agents from their deletion derivatives formed during synthesis.
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85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
Indels
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m
                                                                                                                                          Antisense oligonucleotide to Cytomegalovirus.
Mismatches
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                   927 CCAGCTGCTCCGTGGCCTGG 946
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGCAAGAAGAGAGCAAACG 2
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                                                                                    AAV28268 standard; DNA; 21
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17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                   Cytomegalovirus.
                                                                                                                         08-OCT-1998
                                                                                                                                                                                                                                                          18-DEC-1997;
                                                                                                                                                                                                                                                                             19-DEC-1996;
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                                                                                                                                                                                                                     WO9827425-A1
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                                                                                                                                                                                          Synthetic.
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                                                                                                      AAV28268;
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ID AAV60
XX
AC AAV60
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the primers AAV60724-V60725 were used to PCR amplify codons 1-151 of the human cyclin-dependent kinase 2 (hcDK2). The amplified product was used to generate a fusion protein comprising part of the hcDK2 sequence linked to codons 155-302 of the yeast PHOSB gene. The fusion protein is used to screen for compounds that affect mammalian cell cycle regulatory proteins. The method comprises administering a compound to a cell line, which contains a reporter gene linked to an Upstream Activation Sequence (UAS) and a promoter, where the UAS binds a transcription control factor (TCF) which is regulated through cyclin/cyclin-dependent kinase (CDK) phosphorylation. Also included in the construct is an effector gene product to permit normal cyclin/CDK regulation of the reporter gene is then analysed in the cell line, thereby determining whether the compound affects the normal regulation. The method can be used to identify inhibitors and activators of mammalian cell cyclins, CDKs, cyclin/CDK complexes, cyclin kinase inhibitors of cyclin/CDK complexes, cyclin kinase inhibitors (CKIS), and cyclin/CDK complexes, cyclin dependent can be used for control control control control control control control cyclins, complexes, cyclin dependent control cyclin complexes.
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                                                                   PCR primer; amplification, yeast, UAS; upstream activating sequence; UAS; transcription terminator; cell cycle; Upstream Activation Sequence; UAS; promoter; phosphorylation; cyclin; cyclin-dependent kinase; CDK; vector; cyclin kinase inhibitor; CKI; growth; wound healing; cancer therapy; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Screening for agents that effect cell cycle regulatory proteins - u cell line that expresses a reporter gene in response to regulation through phosphorylation by a cyclin/CDK system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (as in wound healing), or regulating
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85.0%; Pred. No. 6e+02;
iive 0; Mismatches 3; Indels
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Primer #2 for human CDK2 codons 1-151.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 4; Page 68; 93pp; English.
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                                                                                                                                                                                                                                                                                                      Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-OCT-1996;
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                                                                                                                                                                                                                                                                      Synthetic
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Matches
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acid (AAXI7925-XI7948) encoding IE (immediate early) 1 or 2, or DNA polymerase of cytomegalovirus (CMV) and are able to inhibit CMV replication. The sequence shown here represents the target site in the IE2 gene region and corresponds to the nuclear localisation signal 2 sequence. Optionally the oligonucleotides include at least one 2'.(2-methoxyxthoxy) sugar modification or phosphorothioate internucleotide methoxyethoxy) sugar modification or phosphorothioate internucleotide linkages. The oligonucleotides are used to inhibit CMV infections (by in vivo or in vitro contact with cells, iissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis
                                                                                                                                                                                               New antisense oligonucleotides that target cytomegalovirus nucleic acid
                                                                                                                                                                                                                     particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina
                                                                                                                                                                                                                                                                                                                          Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour; 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis; phosphorothioate; DNA-RNA hybrid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CMV antisense chimeric oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
                                                                                                                Chapman S;
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"phosphorothioated"
                                                                                                             Kisner DL, Anderson KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
1. .20
/*tag= a
/note= "phosphorothic
                                                                                                                                                                                                                                                                                  Disclosure; Page 23; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCAAGAAGAAGAGCAAACG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX15075 standard; DNA; 21 BP
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90US-00566977.
91WO-US005720.
92US-00835932.
                            97US-00838715
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.93
Best Local Similarity 85.03
Matches 17, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Д
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/*tag= (
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                                                                 (ISIS-) ISIS PHARM INC.
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                            09-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-AUG-1990;
12-AUG-1991;
05-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-MAR-2003
16-APR-1999
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                                                                                                             Draper KG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Thiazide sensitive cotransporter and ATP sensitive potassium channel genes - useful for developing products for the diagnosis and treatment of ion transport disorders, e.g. Gitelman's Syndrome or Bartter's Syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 respectively) are designed to amplify exon 10 of the human hTSC gene (see AAV40561) that codes for thiazide-sensitive Na-Cl cotransporter TSC (see AAV20682). Both primers are located within introns of hTSC. 27 Sets of specific primers (see AAV40565-V40618) were used for SSCP analysis of hTSC. Amplified products were analysed for molecular variants by electrophoresis, and identified variants were sequenced. Complete linkage of Gitelman's syndrome with TSC was demonstrated. Identification of the molecular basis of Gitelman's syndrome allows for the genetic diagnosis of this disorder. The invention provides products and methods useful for diagnosis and treatment of Gitelman's syndrome and other ion transport
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
Thiazide-sensitive Na-Cl cotransporter; TSC; hTSC gene; human; ion transport; Gitelman's syndrome; Bartter's syndrome; aypokalaemic alkalosis; hypocalciuria; hypomagnesemia; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification; phosphorothioate; infection; retinitis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Primers hTSCex10 forward and reverse (see AAV40585 and AAV40586,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CMV target sequence in immediate early gene region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 9 A; 1 C; 10 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 51; 105pp; English.
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                                                                    therapy; SSCP; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                     Lifton RP, Simon DB;
                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-388029/33
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                                                                                                                               Homo sapiens
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                                                                                                           Synthetic.
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Best Loca Matches

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RESULT 403 AAX17948

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Gaps

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16-FEB-1999

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The present oligonucleotide exemplifies the oligonucleotides of the invention. Oligonucleotides of the invention are nuclease resistant, and comprise covalamily building a ribose or deoxyribose sugar portion and base portion where the nucleosides are or deoxyribose sugar portion and base portion where the nucleosides are joined together by internucleoside linkages such that the base portion of the nucleosides form a mixed base sequence that is complementary to a RNA base sequence. At least one of the nucleosides has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'-amidacoly/alkoxy substituent. The nuclease resistant compounds can be used for used for modulating the activity of DNA or RNA. They can be used for treating organisms having a disease characterised by the undesired treating organisms having a disease characterised by the undesired production of a protein. Diverse organisms such as bacteria, yeast, protococa, algae, plant and higher animal forms including warm-blooded animals can be treated in this manner. The compounds can be used for treating e.g. AIDS, atherosclerosis or tumours. They can also be used in diagnostic methods for detecting the presence or absence of abnormal RNA molecules, or abnormal or inappropriate expression of normal RNA molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR
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                                                                                                                                  New 2'-O-modified oligo-nucleotide(s) - comprising nucleotide(s) comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for hybridisation to RNA or DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour; 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis; phosphorothioate; DNA-RNA hybrid; ss.
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15.0%; Pred. No. 6e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CMV antisense chimeric oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seguence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
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/note= "phosphorothioated"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                         Example 34; Col 53; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21 CGCAAGAAGAAGAGCAAACG 2
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92US-00854634
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Best Local Similarity 85.0'
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/*tag= c
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/*tag=
                                (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (revised)
                                                                    Kawasaki AM;
                                                                                                   WPI; 1999-166721/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
modified_base
01-JUL-1992;
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16-APR-1999
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                                                                    Cook PD,
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The present oligonucleotide exemplifies the oligonucleotides of the invention. Oligonucleotides of the invention are nuclease resistant, and comprise covalently-bound nucleosides that individually include a ribose or deoxyribose sugar portion and base portion where the nucleosides are joined together by internucleoside linkages such that the base portion of the nucleosides form a mixed base sequence that is complementary to a RNA base sequence. At least one of the nucleosides has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'-
                                                                                                                                                                                                                                                                              New 2'-O-modified oligo-nucleotide(s) - comprising nucleotide(s) comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for hybridisation to RNA or DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protozoa, algae, plant and higher animal forms including warm blooded animals can be treated in this manner. The compounds can be used for treating e.g. AIDS, atherosclerosis or tumours. They can also be used in diagnostic methods for detecting the presence or absence of abnormal RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             molécules, or abnormal or inappropriate expression of normal RNA molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              imidazolylalkoxy substituent. The nuclease resistant compounds can be used for modulating the activity of DNA or RNA. They can be used for treating organisms having a disease characterised by the undesired production of a protein. Diverse organisms such as bacteria, yeast,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Phosphorus-linked oligomer; deprotection; protic acid; ether solvent; hybridization probe; amplification primer; forensic; paleontology; antisense agent; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                      Example 34; Col 53; 48pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130 CGGATGAAGAAGATCAAACG 149
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                                                                                90US-00566977.
91WO-US005720.
92US-00835932.
                               95US-00471973.
                                                                   90US-00463358
                                                                                                                                      92US-00854634
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                                                                                                                                                                         (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                            Kawasaki AM;
                                                                                                                                                                                                                                              WPI; 1999-166721/14.
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                               06-JUN-1995;
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                                                                                   13-AUG-1990;
                                                                                                                                       01-JUL-1992;
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                                                                   11-JAN-1990
                                                                                                      12-AUG-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
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Matches
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PHARM INC.
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 WPI; 1999-287949/24.
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modified_base
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Matches
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                                                                                                                                                                        linked oligomers. The method comprises deprotectings a 5'-hydroxy using a protic acid in a aromatic, alkylaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, or aromatic ether solvent. The phosphorus-linked oligomers particularly oligomucleotides, are useful as diagnostic or research reagents, e.g. hybridization probes or amplification primers, useful in forensics, paleontology, evolutionary studies, for screening expression libraries, sequencing etc., or as therapeutic (antisense) agents for inhibiting expression of genes or activity of transcription factors. The aromatic solvents are less expensive to use than hazardous halogenated alkanes since they do not require large investments in recycling equipment to meet environmental standards for disposal. They are thus better sulted for large scale operations. Sequences AXXI1587-594 represent phosphorothioate oligomers synthesized using the new method of the invention
                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                         Use of aromatic solvents during deprotection of 5'-hydroxy groups in solid phase synthesis of oligonucleotides.
                                                                                                                                                                The invention provides improved methods for synthesis of phosphorus
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/note= "phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Phosphorothioate; sulphurised oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Phosphorothioate 21-mer oligonucleotide #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ravikumar VT, Cheruvallath ZS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                           Example 5; Page 28; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                           130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                 ~
                                                                                                                                                                                                                                                                                                                                                                                                                                21 CGCAAGAAGAAGAGCAAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX33398 standard, DNA; 21 BP
99WO-US004213
                    98US-00032972.
                                                                                                                                                                                                                                                                                                                                                                  0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98WO-US021502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-00950779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                              Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
                                                                Ravikumar VT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                         (ISIS-) ISIS PHARM INC
                                                                                    WPI; 1999-540559/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
modified_base
26-FEB-1999;
                   26-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9919340-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-APR-1999
                                                               Krotz AH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cole DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX33398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX33398/c
g
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                                                                                                                                                               The present invention describes a method for preparing phosphorothioate oligonucleotides by phosphitylating the 5'-hydroxyl of a nucleic acid moiety in an accenditile containing solvent mixture to form a phosphite intermediate (II) and oxidizing (II) with an acetyl disulfide in an acetonitrile containing solvent mixture to effect conversion of the intermediate to phosphorothioate (II). The present sequence represents a phosphorothioate oligonucleotide from an example of the present invention. The method can be used to sulphurise oligonucleotides of 8-50 nucleotides. The method is widely applicable throughout nucleic acid nucleotides. The method is widely applicable throughout nucleic acid chemistry. The process allows formation of phosphorothioate linkages in the oligonucleotides or derivatives, without the need for complex solvent mixtures and repeated washing or solvent changes. The process uses a simplified solvent system and produces oligonucleotides having
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection; AIDS; atherosclerosis; tumour; CMV; antisense; DNA/RNA hybrid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= a /note= "contains phosphorothioate linkages; 2' O-methyl modification on some base pairs"
Preparation of Phosphorothioate oligonucleotides applicable throughout
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      phosphorothioate groups with efficiency and improved yields
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chimeric 2'-0-methyl antisense oligo 4326 for CMV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 CGGATGAAGAAGATCAAACG 149
                                                                                                        English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 CGCAAGAAGAAGAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX05474 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90US-00566977.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90US-00463358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 85.0
                                                                                                        Example 3; Page 8; 17pp;
                                    nucleic acid chemistry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .21
/*tag=
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The invention relates to a nuclease resistant compound that hybridises with RNA or DNA. The compound comprises covalently-bound nucleosides that individually include a ribose or deoxyribose sugar portion and a base portion, where the nucleosides are joined together by internucleoside control inkages such that the base portion of the nucleosides form a mixed base sequence that is complementary to a RNA base sequence or to a DNA base sequence; and where at least 1 of the nucleosides includes a modified deoxyfuranosyl moiety bearing a 2' substituent selected from cyano, fluoromethyl, thioalkoxyl, alkylsulphinyl, alkylsulphonyl, allyloxy and thencexy groups. The nuclease resistant oligonucleotides (ONS) can bind to and modulate the activity of DNA or RNA and can be used for treating organisms having a disease characterised by the undesired production of a protein. They can be used in therapeutic or prophylactic treatment in corganisms such as bacteria, yeast, protocoa, algae, plant and higher animal forms including warm-blooded animals. The ONS can also be used for treating infections, AlDS, atherosclerosis or tumours. The products can carried for detection and diagnosis. The ONS provide enhanced binding to targets. Increased binding of 2'-sugar modified sequence-specific ONS carried on securiticity compared to phosphorus-modified ONS. The present sequence represents a chimeric antisense oligo for CMV ö Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection; AIDS; atherosclerosis; tumour; CMV; antisense; DNA/RNA hybrid; ss. /*tag= a
/note= "contains phosphorothioate linkages; 2' O-methy1
modification on some base pairs"
1. .21
/*tag= b Gaps Nuclease resistant oligonucleotide analogues - having nucleosides including modified deoxyfuranosyl moiety bearing 2'-substituent to .; 0 3; Indels Score 15.2; DB 1; Length Pred. No. 6e+02; Chimeric 2'-O-methyl antisense oligo 4325 for CMV. Seguence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other; 0; Mismatches Example 34; Col 54; 49pp; English. 130 CGGATGAAGAAGATCAAACG 149 CGCAAGAGAGAGCAAACG 2 90US-00463358. 90US-00566977. 91WO-US005720. 0.9%; 95US-00468037 AAX05473 standard; DNA; 21 (first entry) increase binding affinity. Conservative Human herpesvirus 5. WPI; 1999-120005/10 Local Similarity nes 17; Conserv Key modified_base 11-JAN-1990; 13-AUG-1990; 12-AUG-1991; 06-JUN-1995; 20-APR-1999 US5859221-A 12-JAN-1999 Synthetic. 21 Query Match AAX05473 misc_RNA RESULT 409 Matches à В

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The invention relates to a nuclease resistant compound that hybridises with RNA or DNA. The compound comprises covalently-bound nucleosides that individually include a ribose or deoxyribose sugar portion and a base portion, where the nucleosides are joined together by internucleoside continuation, where the nucleosides are joined together by internucleoside continuation of the nucleosides form a mixed base sequence that is complementary to a RNA base sequence or to a DNA base sequence; and where at least 1 of the nucleosides includes a modified deoxyfuranosyl moiety bearing a 2' substituent selected from cyano, continuation of the nucleosides includes a modified alkeneoxy groups. The nuclease resistant oligonicleotides (ONS) can bind to alkeneoxy groups. The nuclease resistant oligonicleotides (ONS) can bind corganisms having a disease characterised by the undesired production of a protein. They can be used in therapeutic or prophylactic treating of cryanisms such as bacteria, prest, protozoa, algae, plant and higher canimal forms including warm-blooded animals. The ONS can also be used for detection and diagnosis. The ONS can also be used binding of 2'-ayagar modified sequence-specific ONS trargets. Increased binding of 2'-ayagar modified sequence-specific ONS provides superior potency and specificity compared to phosphorus-modified ONS. The present sequence represents a chimeric antisense oligo for CNV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Phosphorothioate oligonucleotide; benzyl (thio) phosphite residue; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                            Nuclease resistant oligonucleotide analogues - having nucleosides including modified deoxyfuranosyl moiety bearing 2'-substituent to increase binding affinity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 benzyl(thio)phosphoramidite; probe production; linker; adapter;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= a
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Phosphorothicate oligonuclectide #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 34; Col 54; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 cechagadadadededaded 2
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                                 92US-00854634.
92US-00835932.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-OCT-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17; Conservative
                                                                                                       (ISIS-) ISIS PHARM INC.
                                                                                                                                                                              Cook PD, Kawasaki AM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                    WPI; 1999-120005/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene fragment; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
modified base
05-MAR-1992;
01-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9940101-A1
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XX AAX9
XX AAX9
XX AAX9
XX Holos
XX H
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99WO-US002474.

09-FEB-1999;

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This sequence represents a phosphorothioate oligonuclectide synthesised using the method of the invention. The method is for the preparation of oligonucleotides containing a substituted benzyl(thio)phosphite residue comprises reacting an (oligo)nucleotide with a 3' substituted benzyl(thio)phosphoramidite with an (oligo)nucleotide having a free 5'-hydroxy, with one of the reactants, optionally immobilised on a solid phase. The method is used to prepare oligonucleotides, or analogues, for use as probes, primers, linkers, adapters or gene fragments, for diagnostic or therapeutic use, or a research reagents. The specified substituted benzyl group can be eliminated without release of toxic acrylonitrile (contrast conventional 2-cyanoethoxy protecting groups)
                                                                                                                                          Oligonucleotide synthesis using substituted benzyl phosphoramidite for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cellular adhesion protein; proliferation; antisense oligonucleotide; alimentary canal; transport; gastrointestinal mucosa; cancer; Alzheimer's disease; beta-thalassemia; malaria; viral infection; HIV; inflammation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ch 0.9%; Score 15.2; DB 1; Length 21; 1. Similarity 85.0%; Pred. No. 6e+02; 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Target cytomegalovirus antisense oligonucleotide ISIS 2922.
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                          reaction with synthon having free 5'-hydroxy.
                                                                                                                                                                                          Example 12; Page 47; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    130 CGGATGAAGAAGATCAAACG 149
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               98US-00021277.
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ID AAX18799 standard; DNA; 21
                                                                             Ravikumar VT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-MAY-1999 (first entry)
                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                           NPI; 1999-508484/42
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Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hardee G;
               10-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9901579-A1
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                                                                           Capaldi DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-JAN-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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ВР

Example 2; Page 112; 115pp; English

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A pharmaceutical composition has been developed which comprises a nucleic acid and at least one penetration enhancer. The compositions are used:

(i) to treat or prevent any disease or disorder that can be treated with the nucleic acid, e.g. cancer, Alzheimer's disease, beta-thalassemia, malaria, viral infections (including human immune deficiency virus (HIV)), inflammation, in human or animal medicine, (ii) to investigate the role of a gene or gene product in non-human animals; and (iii) to modulate gene expression in cells, tissues or organs. The compositions provide bloavailability of at least 15, preferably 17-35, %. The penetration enhancer improves: (i) transport of the nucleic acid across the mucosa of the alimentary canal and into cells; and (ii) increases stability of the nucleic acid. Oral administration avoids the complications and expense of intravenous or other methods of administration. AAX18669 to AAX18901 represent antisense complications which can be used as the nucleic acid in the method of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modified antisense oligonucleotide with increased bioavailability after oral delivery - has heteroatomic backbone modification or 2'-modified sugar, useful for diagnosis and therapy, e.g. of tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mouse; protein kinase C-alpha; PKC-alpha; antisense oligonucleotide; phosphorthioate; enhanced bicavailability; oral delivery; diagnosis; heteroatomic backbone modification; 2' modified sugar; tumour; autoimmune disease; inflammation; graft vs. host disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Anderson KP,
                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= a
/note= "phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Monia BP, Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2'-MOE gapped version of fomivirsen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                     130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 37; 54pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВР
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV72643 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-FEB-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human herpesvirus 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-009446/01.
                                                                                                                                                                                                                                                                                                    the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9849348-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV72643;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ecker DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 412
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Composition comprising nucleic acid and penetration enhancer - used particularly for delivering therapeutic antisense oligonucleotides across the gastrointestinal mucosa, provides high bioavailability.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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bloavailability than the corresponding phosphorothicate oligodeoxynucleotide. Also described are compositions containing the oligomucleotides having at least one 2'-alkoxyalkoxy sugar modification and at least one 5-methylcytidine (SMeC) residue. The oligomucleotides are antisense oligomucleotides for modulating expression of target genes for diagnostic or therapeutic purposes, e.g. in cases of tumours, autoimmune disease and inflammation, including graft vs. host disease. The specified modifications increase bloavailability from the digestive tract, eliminating the need for intravenous or other routes of administration. The present sequence represents an antisense oligomucleotide which is used in example to examine the effect of 2' modifications on bloavailability after gastrointestinal administration in
The present invention describes oligomucleotides having: (a) at least one heteroatomic backbone modification or at least one 2'-sugar modification; and (b) during or after administration to the alimentary canal, greater
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antisense oligonucleotide; CMV replication; nuclease resistance; RNAse H strand cleavage; phosphorothioate; oligonucleotide therapeutic; AIDS; atherosclerosis; DNA/RNA hybrid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonuclectides eliciting RNAase H activity useful for diagnosis and treatment of diseases e.g AIDS or atherosclerosis.
                                                                                                                                                                                                                                                                                                                             Gaps
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0
                                                                                                                                                                                                                                                                                             Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                   Seguence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide used to inhibit CMV replication.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                            130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                           2
                                                                                                                                                                                                                                                                                                                                                                                         CGCAAGAAGAAGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
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                                                                                                                                                                                                                                                                                               / Match 0.9%;
Local Similarity 85.0%;
les 17; Conservative
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17. .21
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08-NOV-1999
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The present sequence represents a phosphorothioate antisense

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         replication. The oligomucleotide is a gapped 2' modified oligomucleotide, whereby one part has at least two consecutive 2'-F (2'-H) nucleotides and the second part has at least five consecutive nucleotides with 2'-H sugar moieties. The modified oligomucleotide has increased nuclease resistance, and increased binding affinity for substrates. The oligomucleotide elicite RNss H strand cleavage of specific RNss. Oligomucleotide invention are useful for the diagnosis, detection and treatment of conditions susceptible to oligomucleotide therapeutics (e.g. AIDS and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense oligonucleotide; CMV replication; nuclease resistance;
RNAse H strand cleavage; phosphorothioate; oligonucleotide therapeutic;
AIDS; atherosclerosis; DNA/RNA hybrid; ss.
                                                                                                                    atherosclerosis). (Updated on 20-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotides eliciting RNAase H activity useful for diagnosis and treatment of diseases e.g AIDS or atherosclerosis.
                                                                                                                                                                                                                                  Gaps
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CMZ)
                                                                                                                                                                                                Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
oligonucleotide used to inhibit cauliflower mosaic virus
                                                                                                                                                                      Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide used to inhibit CMV replication.
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                                                                                                                                                                                                                                                                130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                              CGCAAGAAGAGAGCAAACG 2
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92WO-US011339.
94US-00244993.
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                                                                                                                                                                                           Query Match
Best Local Similarity 85.0'
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-DEC-1991;
23-DEC-1992;
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This invention describes a novel composition comprising a number of sensor arrays, where each array comprises a unique probe oligonucleotide, which is the reverse complement of part of a unique trarget of larvest complement of part of a unique trarget oligonucleotide present in a mixture of target deletion sequence oligonucleotides. The compositions form a method for characterizing a sample of target deletion oligonucleotides which are labelled and hybridize with the probe oligonucleotides of the ensor arrays. Such oligonucleotides and their targets are represented in AAX23548.X23709. Compositions that are useful for modulating cellular adhesion or proliferation, and being active against a eukaryotic pathogen, a human retrovirus, including influenza virus. Epstein-Barr virus, Respiratory Syncytial Virus or cytomegalovirus (CWV). The compositions enable characterization of deletion sequence oligonucleotides having related,
elicits RNase H strand cleavage of specific RNAs. Oligonucleotides of the invention are useful for the diagnosis, detection and treatment of conditions susceptible to oligonucleotide therapeutics (e.g. AIDS and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Also, if the specificity of the oligonucleotide's nucleobase sequence for its reverse complement is not modified, the method may be performed using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New compositions comprising sensor arrays made up of unique probe oligonucleotides - useful for characterizing a sample of target deletion
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                                         atherosclerosis). (Updated on 20-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen; probe; cellular adhesion modulator; cellular proliferation modulator; human retrovirus; human immunodeficiency virus; non-human retrovirus;
                                                                                                                                                                                                    Gaps
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0
                                                                                                                                                    ch 0.9%; Score 15.2; DB 1; Length 21; l Similarity 85.0%; Pred. No. 6e+02; 17; Conservative 0; Mismatches 3; Indels
                                                                                                           Seguence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Deletion sequence oligonucleotide 131.
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                                                                                                                                                                                                                                             130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                    21 CGCAAGAAGAAGAGCAAACG 2
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                                                                                                                                                                                                                                                                                                                                                                                               AAX23678 standard; DNA; 21
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                                                                                                                                                      Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HIV; primer; ss
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                                                                                                                                                                                                                                                                                                                                                        RESULT 415
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which is the reverse each array comprises a unique probe oligonuclectic, which is the reverse complement of part of a unique probe oligonuclectide, which is the reverse complement of part of a unique target oligonuclectides. The compositions form a method for characterizing a sample of target deletion oligonuclectides which are labelled and hybridize with the probe oligonuclectides which are labelled and oligonuclectides are represented in AAX23548.X23709. Oligonuclectides and their targets are represented in AAX23548.X23709. Compositions that are useful for modulating cellular adhesion or proliferation, and being active against a eukaryotic pathogen, a human immunodeficiency virus (HIV), or a non-human cerrovirus, including influenza virus, Epstein-Barr virus, Respiratory Syncytial Virus or cytomegalovirus (CWV). The compositions enable characterization of deletion sequence oligonucleotides having related, but different nucleobase sequences, and quantification of different species of deletion sequence ("target") oligonucleotides in a mixture. Also, if the specificity of the oligonucleotide's nucleobase sequence for the oligonucleotide's nucleobase sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New compositions comprising sensor arrays made up of unique probe oligonuclectides - useful for characterizing a sample of target deletion oligonuclectides.
                                                                                                                                                                                                                                                                                                                                                                                                                             Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen; probe; cellular adhesion modulator; cellular proliferation modulator; human retrovirus; human immunodeficiency virus; non-human retrovirus;
                                                                                               Gaps
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                                                      DB 1; Length 21;
                                                                                             Indels
                Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
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                                                                                           3;
                                                  1) O.9%; Score 15.2; DB 1) O. State DB 1 D. State DB 1 Dred. No. 6e+02; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                          Deletion sequence oligonucleotide 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 89; 163pp; English
                                                                                                                                   130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                        21 CGCAAGAAGAGAGCAAACG 2
                                                                                                                                                                                                                                                                       BP
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                                                                  Local Similarity
nes 17; Conserv
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                                                      Query Match
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DB 1; Length 21;

0.9%; Score 15.2;

Query Match

Sequence 21 BP; 6 A; 4 C; 9 G; 2 T; 0 U; 0 Other;

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Gaps

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Containing a Human immunodeficiency virus (HIV) homology region and a callular regulatory factor. Defibriotide is a polyamino salt of a callular regulatory factor. Defibriotide is a polyamino salt of a deoxyribonucleic acid obtained from mammalian tissue. The products can be careful, protozoan infection, schistosoma infection e.g. Schistosoma infection infection, schistosoma infection e.g. Candida tropicalis and japonicum. Schistocarca Leishmania infection, Trypanasoma infection e.g. Candida tropicalis and candida Albicans, Aspergillus infection, pneumocystis carinii infection, candida Albicans, Aspergillus infection, bneman papilloma cytromegalovirus infection, departicles virus infection, genetic diseases e.g. Duchenne's muscular dystrophy and Down's syndrome; degeneratic diseases e.g. buchenne's macular dystrophy and convins infection damage; neorgases, neuropathy, cardiomyopathy, admentia, altaheimer's Syndrome, retinitis pigmentosa, ataxia, selzures, proximal muscle weakness, Leber's factoration, panceratic cancer, neuroblastoma, cleukemia, bladder carcinoma, breast cancer, skin cancer, ung cancer, and colon cancer; and skin diseases, e.g. molluscum contagiosum, bacillary colon cancer; and skin diseases, e.g. molluscum contagiosum, bacillary colon cancers, and skin diseases, e.g. molluscum contagiosum, bacillary colon cancers, and skin diseases, e.g. molluscum contagiosum, bacillary colon cancers, and skin diseases, e.g. molluscum contagiosum, bacillary addition a drug resistance can be treated via administering the nucleic cating components of defibrotical dermatitis, Bosinophilic folliculitis. In addition a drug resistance can be treated via administering the nucleic cating components of defibrotical dermatitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Use of defibrotide nucleic acid components - for treating e.g. infectious diseases, genetic diseases, degenerative diseases, DNA damage, neoplasia and skin disease, particularly HIV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                         Schistocerca Leishmania; Trypanasoma; fungus infection;
Pneumocystis carinii; malaria; viral infection; genetic disease;
Duchenne's muscular dystrophy, Down's syndrome; degenerative disease;
neoplasia; cancer; skin condition; drug resistance; ss.
                                                                                                                                                                                                                                                                                                                                                                                                      defibriotide; polyanion salt; HIV; protozoan infection; schistosoma;
                                                                                                                                                                                                                                                                                                                                                        HIV 5' UTR homology region and cellular regulatory factor (c-abl).
                         3; Indels
                       0; Mismatches
    Pred. No.
                                                                     130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 33; Page 84; 96pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e.g. a protease inhibitor
                                                                                                            21 CGCAAGAAGAAGAACG 2
                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-US008357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-00848013
82.08;
                                                                                                                                                                                                                         AAV99279 standard; DNA; 21
                                                                                                                                                                                                                                                                                                              09-MAR-1999 (first entry)
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-034643/03.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-APR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                     AAV99279;
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                                                                                                                                                                               RESULT 417
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present oligomucleotide is given in a specification disclosing a new lipid compound and its salts, solvates and hydrates. The compound comprises a hydrophobic tail part covalently linked to a hydrophilic head part. A region proximal to the hydrophobic tail part has a net positive charge at physiological pH and a region distal to the hydrophobic tail part has a net negative charge at physiological pH. A disulphide bond connects the regions. The lipid compound is useful for the construction of liposomes used as vehicles for delivering pharmaceutical agents into cells. The lipids and liposomes are fusogenic with membranes and deliver pharmaceutical agents to tissues or cells without inherent aggregation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New pro-cationic lipid compounds useful as components of liposomes used as vehicles for delivering pharmaceutical agents into cells.
                                          Gaps
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85.0%; Pred. No. 6e+02;
iive 0; Mismatches 3; Indels
            DB 1; Length 21;
                                        Indels
                                                                                                                                                                                                                                                                                                 Phosphorothioate, lipid, liposome, drug deliver, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                        3;
                          6e+02;
         0.9%; Score 15.2; E
85.0%; Pred. No. 6e+0
ive 0; Mismatches
                                                                                                                                                                                                                                                                   Phosphorothioate oligonucleotide ISIS-2922.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 31; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       130 CGGATGAAGAAGATCAAACG 149
                                                                       950 ACTGCCACCGGCAGAAGGTG 969
                                                                                                    1 Agricca Accederace 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 CGCAAGAAGAAGAGCAAACG 2
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                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                      06-APR-2000; 2000WO-US009473.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-00287175.
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                                                                                                                                                                             AAC62738 standard; DNA; 21
                                                                                                                                                                                                                                     (first entry)
                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    which reduces toxicity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-679320/66.
                       Local Similarity
es 17; Conserv
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es 17; Conserv
                                                                                                                                                                                                                                                                                                                                                            WO200059474-A1
                                                                                                                                                                                                                                                                                                                              Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-APR-1999;
                                                                                                                                                                                                                                       05-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                          12-OCT-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Leamon CP;
                                                                                                                                                                                                         AAC62738;
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              Query Match
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                                                                                                                                              RESULT 418
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                                           Matches
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Leamon CP;

S.C.

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Reporter probes AAC61629-32 were used to detect human lymphotoxin gene alleles. The method of the invention was used for detecting single nucleotide polymorphisms (SNPs) in the lymphotoxin gene. The method utilises electronic circuitry on silicon microchips. The method provides accurate discrimination of amplified DNA samples following electronic transport, concentration, and attachment of DNA to selectrodes (test sites). The test sites make up organised arrays of samples that are comprising wild type and mismatched sequences to validate the SNP genotype. Multiples of SNPs in target nucleic acids from a patient sample sources can also be detected using the electronically addressable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense inhibitor; oligonucleotide delivery agent; erythema multiforme; expression modulator; cellular adhesion protein; malignant melanoma; cellular proliferation modification; toxic epidermal necrolysis; psoriasis; lichen planus; carcinoma; Paget's disease; Kaposi's sarcoma; pulmonary fibrosis; Lyme disease; infection; therapy; HCMV; ss.
                                                                                                                           Detecting single nucleotide polymorphism by utilizing a bioelectronic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New oligonuclectide compositions for topical delivery, used for the delivery of bioactive agents for, e.g. modulating expression of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.2; DB 1; Length 21;
15.0%; Pred. No. 6e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tsai YJ,
                                              Chanock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 1 A; 8 C; 3 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ecker DJ,
                                            Foster CB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HCMV antisense inhibitor, ISIS-2922.
                                                                                                                                                    microchip having several test sites
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 47; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1688 TCTTCCCTGCTTACTCTCTG 1707
                                                                                                                                                                                         Example 3; Page 17; 46pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rcieccardcirccicrcic 21
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                                            Wu DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ48640 standard; DNA; 21 BP
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Matches 17; Conservative
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                                            Dillon PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hardee GE,
  (NANO-) NANOGEN INC
                                                                                    WPI; 2000-638354/61.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                            Giles PN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               microchip
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present oligonucleotide is given in a specification disclosing a new lipid compound and its salts, solvates and hydrates. The compound comprises a hydrophobic tail part covalently linked to a hydrophilic head part. A region proximal to the hydrophobic tail part has a net positive charge at physiological pH and a region distal to the hydrophobic tail part has a net negative charge at physiological pH. A disulphide bond connects the regions. The lipid compound is useful for the construction of liposomes used as vehicles for delivering pharmaceutical agents into cells. The lipids and liposomes are fusogenic with membranes and deliver pharmaceutical agents to tissues or cells without inherent aggregation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New pro-cationic lipid compounds useful as components of liposomes used as vehicles for delivering pharmaceutical agents into cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatch reporter probe used to detct human lymphotoxin gene alleles.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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85.0%; Pred. No. 6e+02;
iive 0; Mismatches 3; Indels
                                                                                 Phosphorothioate; lipid; liposome; drug deliver; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, lymphotoxin; bioelectronic microchip;
                                          Phosphorothioate oligonucleotide ISIS-13312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            single nucleotide polymorphism; probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 31; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 CGCAAGAAGAAGAGCAAACG 2
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                                                                                                                                                                                                                                                       06-APR-2000; 2000WO-US009473.
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(first entry)
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Best Local Similarity 85.0'
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             which reduces toxicity
                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                           4PI; 2000-679320/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200058522-A1
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05-FEB-2001
                                                                                                                           Unidentified
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                                                                                                                                                                                                                                                                                               06-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-OCT-2000
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AAC61632;

RESULT 420 AAC6163

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Gaps

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Templin MV;

This sequence represents an antieense inhibitor of HCWV. The invention relates to a pharmaceutical composition comprises an oligonucleotide (ON) admixed with a topical delivery agent. The compositions can be used for the delivery of a ribozyme, an external guide sequence, an antisense ON, an antisense peptide nucleic acid, an aptamer or a molecular decoy. The ONS can be used to modulate expression of a cellular adhesion protein or modulate a rate of cellular proliferation. The compositions can also be used to treat psoriasis. They can also be used to treat psoriasis. They can also be used to treat because cell carcinoma, malignant melanoma, paget's disease, carcinoma, squamous cell carcinoma, malignant melanoma, paget's disease, carcinoma, squamous cell carcinoma, malignant melanoma, paget's disease, carcinoma squamous cell carcinoma, malignant melanoma, paget's disease, carcinoma including chickens and turkeys, domestic household, sport or farm animals including rats, mice, rabbits and guinea pigs, cish, reptiles and zoo animals. The compositions and methods may also be used to examine the function of various proteins and genes in vitro in cultured or preserved dermal tissues and in animals

DB 1; Length 21; Score 15.2; DB 1; Length 2: Pred. No. 6e+02; 0; Mismatches 3; Indels Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other; 0.9%; 17; Conservative Query Match Best Local Similarity

130 CGGATGAAGAAGATCAAACG 149 CGCAAGAAGAAGAACG 2 21 ð a

Matches

BP.

AAA39246 standard; DNA; 21 AAA39246; RESULT 422 AAA39246

07-SEP-2000 (first entry)

Hair; keratin; hair cleansing composition; pre-shampoo; shampoo; conditioning rinse; hair styling; gel; spray; mousse; dyeing; bleaching; tinting; nail care product; nail polish remover; nail polish; PCR primer; Mouse type II hair keratin clone pmKII-6 3'-noncoding region PCR primer.

Mus sp.

WO200023039-A2.

27-APR-2000.

99WO-US024426. 18-OCT-1999; 98US-00174186, 16-OCT-1998;

Д (ENST/) ENSTEY

Ensley BD;

WPI; 2000-339487/29.

Formulating hair treatment composition useful for producing hair preparations for improved hair characteristics by using human keratin allelic variants, which has not been cross-linked.

Example 3; Page 43; 55pp; English.

present invention describes a method for formulating a hair treatment composition by using non-naturally occurring human keratin protein which has not been previously cross-linked. The method is useful for producing hair treatment composition for improved hair characteristics, and hair treatment preparations tailored to an individual's preference. The keratin is added to hair cleansing compositions, e.g. pre-shampoo, The

shampoo, or conditioning rinse, to hair styling or shaping compositions, e.g. gel, spray or mousse, or in hair dyeing, bleaching or tinting compositions. It may also be used in developing nail care products, such as nail polish and nail polish remover. The method provides hair treatment preparations tailored to the individual's preferences as well as to the manufacturers' preferences of hair treatment compositions. The present sequence represents a PCR primer for the murine type II hair feratin clone pmKII-63'-noncoding region, which is used in an example from the present invention 9999999999988

Sequence 21 BP; 3 A; 7 C; 8 G; 3 T; 0 U; 0 Other;

Gaps ; 0 0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; iive 0; Mismatches 3; Indels Local Similarity 85.0 nes 17; Conservative Query Match Matches

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> à g

AAZ40364 standard; DNA; 21 AAZ40364/

BP.

RESULT 423

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Gaps

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AAZ40364;

(first entry) 02-MAR-2000

Antisense inhibitor of HCMV, ISIS-2922.

Antisense oligonucleotide, inhibitor; pulmonary delivery composition; gene expression modulation; asthma; lung cancer; pulmonary fibrosis; rhinovirus; tuberculosis; bronchitis; pneumonia; pulmonary disorder; viral disease; obstructive lung disorder; pulmonary embolism; emphysema; anaphylaxis; chronic obstructive pulmonary disease; COPD; bronchiectasis; chronic bronchitis; cystic fibrosis; therapy; HCMV; ss.

WO9960010-A1.

25-NOV-1999

99WO-US011214. 20-MAY-1999;

98US-00083585. 21-MAY-1998;

(ISIS-) ISIS PHARM INC

Cook PD; Ecker DJ, Bennett CF,

WPI; 2000-062437/05.

Composition for pulmonary delivery useful for treating and diagnosing pulmonary diseases such as asthma, tuberculosis, etc. pulmonary diseases such as asthma,

Claim 54; Page 33; 85pp; English.

This sequence represents an antisense inhibitor of HCMV. The invention relates to a pharmaceutical composition (C) for pulmonary delivery of an oligonucleotide, comprising at least one oligonucleotide or its bioequivalent. (C) can be used to investigate the role a of gene or gene product in an animal other than human. (C) is also useful in a method of modulating the expression of a gene in an animal. (C) is useful in treating or diagnosing asthma, lung cancer, pulmonary fibrosis, rhinovirus, tuberculosis, bronchitis, pneumonia. The oligonucleotides are useful in determining the nature, function and potential relationship to body or disease status in animal of various genetic components of the body. (C) is useful for therapeutic, palliative or prophylactic treatment or to prevent the onset or recurrence of the diseases associated with pulmonary disorders. (C) is also useful in the treatment of diseases caused by viruses (such as respiratory syncytial virus, Hemophilus

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influenza, parainfluenza, etc.), obstructive lung disorders (such as pulmonary embolism or anaphylaxis), chronic obstructive pulmonary disease (COPD), emphysema, chronic bronchitis, bronchiectasis and cystic fibrosis. (C) administered through pulmonary delivery overcomes the complication and expenses associated with other routes of administration. Modified or substituted oligonucleotides have enhanced cellular uptake, target binding and increased stability in the presence of nucleases. Pulmonary administration of phosphodiester oligonucleotides lowers the level of nuclease activity in lung tissue to afford phosphodiester oligonucleotides longer lifetimes in lung tissue
                           8 \times 8
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Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Query Match

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Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                             130 CGGATGAAGAAGATCAAACG 149
   0.9%;
                Local Similarity 85.0
nes 17; Conservative
                                Matches
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0

Gaps

.. 0

21 CGCAAGAAGAAGAGCAAACG 2 ВP AAZ47919 standard; DNA; 21 AAZ47919; RESULT 424 AAZ47919/

HCMV phosphorothioate antisense oligonucleotide ISIS 13312. (first entry) 10-MAR-2000

Phosphorothioate; antisense oligonucleotide; HCMV; pulmonary delivery; asthma; lung cancer; pulmonary fibrosis; cytostatic; antiasthmatic; antiviral; runovirus; tuberculosis; bronchitis; pneumonia; anaphylaxis; respiratory synctial virus; parainfluenza; obstructive lung disorder; pulmonary embolism; chronic obstructive pulmonary disease; COPD; emphysema; chronic bronchitis; bronchiectasis; cystic fibrosis; ss.

Human herpesvirus 5. Synthetic

/note= "phosphorothioate linkages" Location/Qualifiers /*tag= Key modified_base

WO9960166-A1

99WO-US011141. 20-MAY-1999; 25-NOV-1999

98US-00083586. 21-MAY-1998;

(ISIS-) ISIS PHARM INC

PD; Cook Sennett CF, Ecker DJ,

WPI; 2000-062466/05

pharmaceutical composition useful for pulmonary delivery of gonucleotide for treating asthma, lung cancer and pulmonary fibrosis. oligonucleotide for treating asthma, lung Claim 62; Page 34; 90pp; English.

pulmonary delivery of an oligonucleotide comprising at least one coligonuclectide where the sugar moiety of at least one nucleoside unit of the oligonucleotide is not a 2'-deoxyribofuranosyl sugar moiety or at least one internucleotide linkage within the oligonucleotide is not a phosphodiester or a phosphotioate linkage. The composition is useful for treating an animal having or suspected of having a disease or a disorder The present invention describes a pharmaceutical composition for

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                                                                          influenzae, parainfluenza, obstructive lung disorders e.g. pulmonary embolism or anaphylaxis, chronic obstructive pulmonary disease (COPD), emphysema, chronic bronchietis, bronchiectesis and cystic fibrosis. The oligomuclectides are also useful for determining the nature, function and potential relationship to body or disease states in animals or various genetic components of the body. Pulmonary administration of an antisense oligomuclectide bypasses the complications and expense associated with intravenous and other routes of administration providing enhanced delivery of the oligomuclectides. The modified oligomuclectides have enhanced callular uptake, enhanced binding to target and increased stability in the presence of mucleases. The present sequence represents an antisense oligomuclectide used in the exemplification of the present
that is treatable with one or more nucleic acids e.g. asthma, a cancer the lung, pulmonary fibrosis, rhinovirus, tuberculosis, bronchitis or pneumonia and other lung disorders e.g. respiratory synctial virus, H.
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0.9%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention
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Antisense oligonucleotide; phosphorothioate; inhibition; liposome; long-circulating liposome; anticancer; anti-inflammatory; tumour; inflammation; autoimmune disease; cytostatic; immunosuppressive; HCMV targeting antisense oligonucleotide ISIS-2922 SEQ ID NO:2. AAZ48120 standard; DNA; 21 BP 14-MAR-2000 (first entry) gene therapy; ss. AAZ48120, RESULT 셤

/note= "phosphorothioate linkages" Location/Qualifiers /*tag= Human herpesvirus 5. Key modified_base WO9959547-A1. Synthetic

25-NOV-1999

99WO-US011267 98US-00082365 (ISIS-) ISIS PHARM INC. 20-MAY-1999; 21-MAY-1998;

Leamon C; Hardee GE, Mehta R,

WPI; 2000-072399/06

New liposome compositions having long plasma half-lives, used for delivering compounds for treating e.g. tumors, inflammation or autoimmune diseases.

Disclosure, Page 33; 91pp; English.

The present invention describes a liposome (I) which has a plasma half-life of at least 5 hours and comprises at most 10 mol \$ of a

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prospiratory The liposomes can be used to encapsulate a bioactive agent, e.g. an anticancer agent, an anti-inflammatory agent, an anticancer agent, an anti-inflammatory agent, an anticancer agent, an anti-inflammatory agent, an antisense compound (such as a hemimer, molecular decoy or an aptamer) or an antisense compound (such as a ribozyme, an external guide sequence, a compound comprising at most synthetic molety which has nuclease activity, an attisense peptide nucleic acid, an attisense nucleotide and/or comprising a sequence that hybridises to a nucleotide and/or a viral gene or a gene encoding a cellular adhesion molecule). Such liposomes can be used for: (1) preventing cancer or reducing the everity of inflammation in a mammal; (2) preventing or reducing the severity of inflammation in a mammal; (2) preventing, or organisms expression of a gene by contacting cells, tissues, organs or organisms expression of a gene by contacting cells, tissues, organs, reducing the arte of progression of or reducing the severity of symptoms resulting from an autoimmune disease in a mammal. The liposomes have long circulating half-life in mammalian plasma, AAZ48119 to AAZ48130 represent
                                                                                                                                                                                phosphatidylglycerol (PG) compound that has a fatty acid portion of 10 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antisense oligonucleotide sequences used in the exemplification of the
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0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; 3; Indels Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other; 0; Mismatches 130 CGGATGAAGAAGATCAAACG 149 Conservative Local Similarity es 17; Conserv Query Match Best Loca Matches

present invention

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Gaps

. 0

21 CGCAAGAAGAAGAACG 2 ð Db

HCMV targetted phosphorothioate antisense oligonucleotide ISIS 13312 AAZ49391 standard; DNA; 21 (first entry) 14-MAR-2000 AAZ49391; 426

BP

Viral infection; expression; modulation; antisense; non-parenteral; delivery; uptake; administration; emulsion; ulcerative colitis; Crohn's disease; inflammatory bowel disease; cellular proliferation; HCMV; human cytomegalovirus; ss.

Human herpesvirus 5. Synthetic

note= "2'-methoxyethoxy oligonucleotides" /mod_base= OTHER /note= "Phosphorothioate linkages" Location/Qualifiers /*tag= b /mod_base= OTHER /*tag= d /mod_base= m5c m5c /*tag= c /mod_base= m5c mod_base= ĸ Φ /*tag= /mr? *tag= modified_base modified base modified base modified_base modified base modified_base

oligonuclectides designed to have therapeutic activity against certain non-retroviral viruses. The invention relates to new compositions for the non-parenteral delivery of oligonuclectides comprising at least one oligonuclectide in an emulsion. Oligonuclectides delivered via the compositions of the invention can be used to modulate expression of a cellular adhesion protein, modulate a rate of cellular proliferation, or have biological activity against eukaryotic pathogens or retroviruses. They can be used for treating conditions including e.g., ulcerative colitis, Crohn's disease, inflammatory bowel disease or undue cellular. proliferation. The compositions can enhance the local and systemic uptake and delivery of nucleic acids via non-parenteral routes of administration New oligonucleotide compositions used for the non-parenteral delivery of e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular decoys, external guide sequences or aptamers. (e.g., via the alimentary canal, skin, eyes, pulmonary tract, urethra or Gaps AAZ49374-Z49383, AAZ49389 and AAZ49391 represent antisense Manoharan M; .. 0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels note= "2'-methoxyethoxy oligonucleotides" Ecker DJ, Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other; Hardee GE, Claim 80; Page 37; 133pp; English. 130 CGGATGAAGAAGATCAAACG 149 21 CGCAAGAAGAAGAGCAAACG 2 /mod_base= m5c /*tag= i /mod_base= m5c Cook PD, Tillman L, 99WO-US011394 98US-00082624 *tag= h Conservative (ISIS-) ISIS PHARM INC. WPI; 2000-072428/06. Local Similarity es 17; Conserv modified base modified_base 20-MAY-1999; 21-MAY-1998; WO9960012-A1 25-NOV-1999 Sequences Query Match Teng C, Matches à g

BP AAZ49383/c ID AAZ49383 standard; DNA; 21 (first entry) 14-MAR-2000 AAZ49383; RESULT 427

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Viral infection; expression; modulation; antisense; non-parenteral; delivery; uptake; administration; emulsion; ulcerative colitis; crohn's disease; inflammatory bowel disease; cellular proliferation; HCMV; human cytomegalovirus; ss. HCMV targetted phosphorothioate antisense oligonucleotide ISIS 2922

Human herpesvirus 5. Synthetic

Key

/*tag= g /mod_base= OTHER

mod_base= m5c.5..20

modified base

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*tag=

Location/Qualifiers

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                                                                                                                                                                                                                                                                                                                                                                                                                                   oligomiclectides designed to have therapeutic activity against certain non-retroviral viruses. The invention relates to new compositions for the non-parenteral delivery of oligomiclectides comprising at least one oligomiclectide in an emulsion. Oligomiclectides delivered via the compositions of the invention can be used to modulate expression of a cellular adhesion protein, modulate a rate of cellular proliferation, or have biological activity against eukaryotic pachogens or retroviruses. They can be used for treating conditions including e.g., ulcerative proliferation. The compositions can enhance the local and systemic uptake and delivery of nucleic acids via non-parenteral routes of administration
                                                                                                                                                                                                                                                                                                                   New oligonucleotide compositions used for the non-parenteral delivery of e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular decoys, external guide sequences or aptamers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             via the alimentary canal, skin, eyes, pulmonary tract, urethra or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequences AAZ49374-Z49383, AAZ49389 and AAZ49391 represent antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Polyribonucleotide solid phase synthesis; diagnosis; hybridisation; protein production modulation; 2'-deoxyfuranosyl moiecy; anti-HIV; antiarteriosclerotic; nuclease resistant; arherosclerosis; AIDS; abnormal cell proliferation; tumour formation; ss.
                                                                                                                                                                                                                                                      Manoharan M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.2; DB 1; Length 21; 35.0%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
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                                               /note= "Phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                    Hardee GE,
                                                                                                                                                                                                                                                                                                                                                                                      Claim 80; Page 37; 133pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 CGGATGAAGAAGATCAAACG 149
               /*tag= a
/mod_base= OTHER
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                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
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modified base
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                                                                                                                                                                                    21-MAY-1998;
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                                                                                  WO9960012-A1
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The present invention describes nuclease resistant oligonucleotides (I) comprising 2'-fluoro modified ribofuranosyl nucleotides. (I) comprise covalently bound nucleotides, where the nucleotides are joined together by: (a) internucleotide linkages such that the base portion of the nucleotides forms a mixed base sequence; and (b) at least one of the nucleotides forms a modified ribofuranosyl group bearing a 2'-fluoro substituent; provided that at least two of the nucleotides are 2'-fluoro modified ribofuranosyl nucleotides when the internucleotide linkages are phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its appropriate strength and fidelity to its target RNA/DNA. (I) are also useful as research agents, diagnostic agents and as oligonucleotide therapeutics. (I) may be used to treat atheroscalerosis following angioplasty to prevent reocclusion of the treated arteries. (I) have been used in conjunction with AZT to treat AIDS patients. (I) have been used to modulate the expression of RAF gene, a callular gene whose activate form has been implicated in abnormal cell proliferation and thouse the expression of the treated arteries. (I) may also be the conjunction with hard to the properties of higher quality than a chocker whose conjunction with a properties of higher quality than a chocker whose conjunction with a properties of higher quality than a chocker whose conjunction with a properties of higher quality than a chocker whose conjunction with a conjunction properties of higher quality than a chocker whose conjunction with a conjunction properties of higher quality than a conjunction with a conjuncti
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                                                                                                                                                                                                                                                                                                                                                                    Nuclease resistant oligonucleotides useful as research agents, diagnostic agents, and in the treatment of atherosclerosis and AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            phosphorous modified oligonucleotide duplexes containing methylphosphonates, phosphoramidates and phosphate triesters. The present sequence represent an oligonucleotide used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CMV replication chimeric phosphorothioate oligonucleotide SEQ ID NO:18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 34; Col 54; 49pp; English
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                                              90US-00566977.
91WO-US005720.
                                                                                                   92US-00835932
                      90US-00463358
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                                                                                                                                                                                                         PHARM INC.
                                                                                                                                                                                                                                                              Cook PD;
                                                                                                                                                                                                                                                                                                               WPI; 2000-072074/06.
                                                                                                                                                                                                                                                              Kawasaki AM,
                                              13-AUG-1990;
12-AUG-1991;
                                                                                                                                                                                                         SISI (-SISI)
                                                                                             05-MAR-1992;
01-JUL-1992;
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Matches
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modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes nuclease resistant oligonucleotides (I) comprising 2-fluoro modified ribofuranosyl nucleotides. (I) comprise covalently bound nucleotides, where the nucleotides are joined together by: (a) internucleotide linkages such that the base portion of the nucleotides forms a mixed base sequence; and (b) at least one of the nucleotides includes a modified ribofuranosyl group bearing a 2-fluoro substituent; provided that at least two of the nucleotides are 2-fluoro modified ribofuranosyl nucleotides when the internucleotide linkages are phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its expression. (I) are resistant to nuclease degradation and hybridise with appropriate strength and fidelity to its target RNA/DNA. (I) are also useful as research agents, diagnostic agents and as oligonucleotide therapeutics. (I) may be used to treat atherosclerosis following angioblasty to prevent reocclusion of the treated arteries. (I) may also be used in conjunction with AZT to treat AIDS patients. (I) have been
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      used to modulate the expression of RAF gene, a cellular gene whose activate form has been implicated in abnormal cell proliferation and tumour formation. (I) are also used to modulate the expression of protein kinase C. (I) exhibit hybridisation properties of higher quality than phosphorous modified oligonuclectide duplaxes containing methylphosphonates, phosphoramidates and phosphate triesters. The present sequence represent an oligonucleotide used in the exemplification of the
                                                                                                                                                                                                                Nuclease resistant oligonucleotides useful as research agents, diagnostic agents, and in the treatment of atherosclerosis and AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                     Example 34; Col 54; 49pp; English.
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                                                           90US-00566977.
                         98US-00035357
                                                 90US-00463358
                                                                                    92US-00835932
                                                                                                   92US-00854634
                                                                                                               95US-00468037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.9%;
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                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                  Cook PD;
                                                                                                                                                                                         WPI; 2000-072074/06.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 present invention
                                                                                                                                                                  Kawasaki AM,
                         05-MAR-1998;
                                                  11-JAN-1990;
                                                              13-AUG-1990;
                                                                          12-AUG-1991;
                                                                                      05-MAR-1992;
                                                                                                               06-JUN-1995;
                                                                                                   01-JUL-1992
21-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA14473;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 430
AAA14473/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
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The invention relates to the use of acetonitrile having a water content of 30-1250 ppm in the linking of a phosphoramidite nucleoside to a solid support-bound nucleoside, and to the use of this process in the synthesis of oligonucleotides. The method is used for the coupling of a phosphoramidite nucleoside to a solid support-bound nucleoside, particularly in the large-scale synthesis of oligonucleotides using the phosphoramidite method. The oligonucleotides can be used in diagnostic, research and therapeutic applications, e.g., as probes, primers, linkers, adapters and antisense oligonucleotides. The use of acetonitrile having a water content of 30-1250 ppm as compared to conventional methods using lower water content acetonitrile (at most 30 ppm) provides more economical synthesis without reduced efficiency of oligonucleotide synthesis. Sequences AAA14474 represent oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Phosphorothicate, activator, oligonuclectide synthesis; phosphoramidite, phosphitylating reagent; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Coupling of a phosphoramidite nucleoside to a solid support-bound nucleoside, useful for the synthesis of oligonucleotides for use in diagnostic, research or therapeutic applications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/note= "phosphorothioate linkages"
/*tag= a
/note= "Phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthesised using the process of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Phosphorothioate 21-mer oligonucleotide #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
1. .21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 8; Page 20; 30pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ57151 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                       98US-00167165.
                                                                                                                                                                                                                                       99WO-US022892.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.9
Best Local Similarity 85.0
Matches 17, Conservative
                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-303729/26.
                                                                                                  WO200020431-A1
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modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9962922-A1.
                                                                                                                                                                                                                                    01-OCT-1999;
                                                                                                                                                                                                                                                                                                       06-OCT-1998;
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                                                                                                                                                                     13-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                            Scozzari A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ57151;
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The present invention describes nucleoside phosphoramidites and oligomucleotides (OW's) prepared using pyridinium, imidazolium or benzimidazolium salts as activators. The preparation of a phosphitylated compound comprises reacting a compound having a hydroxyl group with a phosphitylating reagent in the presence of a pyridinium salt in a solvent. The phosphoramidites are useful as building blocks for synthesis of oligomucleotides, which are potentially useful in therapeutic and lagnostic applications. The activators can be produced in situ by mixing pyridine and an acid, producing benefits in large scale synthesis. Compared with conventional activators, e.g. 1H tetrazole, the pyridinium captus, and materials necessary for their generation in situ, are nonexplosive and easier to store, and also cheaper and have higher solubility in organic solvents. Final purity of the phosphitylated pyridinium salts are used. The present sequence represents a phosphorothioate 21-mer oligomucleotide, the synthesis of which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "Phosphorothioate internucleotide linkage"
                                                                                                                                                                                        Preparation of nucleoside phosphoramidites and oligonucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example biologically active oligonucleotide #3.
                                                                                                                          Ravikumar VT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                       Example 20; Page 81; 153pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 CGCAAGAAGAAGAAGC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA94541 standard; DNA; 21 BP
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             99WO-US012251
                                           98US-0087757P
98US-00177953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17; Conservative
                                                                                                                          Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag=
                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                          WPI; 2000-097311/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
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modified_base
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              02-JUN-1999;
                                           02-JUN-1998;
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                                                             23-OCT-1998;
                                                                                                                          Sanghvi Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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AAA94541/
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Gaps

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                                                                                                                                                      The present invention relates to non-parenteral multi-particulate formulations for transporting agents (for example therapeutic) across mucosal membranes. The formulations comprise carrier particles bound with a biologically active agent and a penetration enhancer. The formulations associate with buccal, nasal, pulmonary, gastrointestinal and vaginal mucosal membranes to transport the biologically active agents to the lymph system, blood system or epithelial tissue of the subject. The formulation is administered orally which is preferred by patients. The present sequence is an example oligonucleotide that may be used in the
                                                                           Non-parenteral multi-particulate formulations comprise biologically active substances bound to carrier particles for delivery across mucosal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate; 2'-0-methoxyethyl; 5-methylcytidine; ss.
                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'note = "Phosphorothioate internucleotide linkage"
                                                                                                                                                                                                                                                                                                                                                            .<u>.</u>
                                                                                                                                                                                                                                                                                                                               Score 15.2; DB 1; Length 21; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mod_base= OTHER
/note= "2'-0-methoxyethyl nucleoside'
                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                          3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example biologically active oligonucleotide #6.
                          Teng C;
                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                          Mehta RC,
                                                                                                                                                                                                                                                                                                                                                                                    130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= g
/mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                            21 CGCAAGAAGAAGAACG 2
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                                                                                                                                Claim 4; Page 8; 38pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  m5c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                               Query Match 0.9%;
Best Local Similarity 85.0%;
Matches 17; Conservative
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/mod_base= 1
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15. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA94544 standard; DNA; 21
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                          Tillman LG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 *tag=
(ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         *tag=
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                                                 WPI; 2000-572032/53
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modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-JAN-2001
                                                                                                                                                                                                                                                                              Formulation
                          Hardee GE,
                                                                                                      membranes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA94544;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 433
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The present invention relates to non-parenteral multi-particulate formulations for transporting agents (for example therapeutic) across mucosal membranes. The formulations comprise carrier particles bound with a biologically active agent and a penetration enhancer. The formulations associate with buccal, nasal, pulmonary, gastrointestinal and vaginal mucosal membranes to transport the biologically active agents to the lymph system, blood system or epithelial tissue of the subject. The formulation is administered orally which is preferred by patients. The present sequence is an example oligonucleotide that may be used in the
                                                                                                                                                                                                                                                                                                       Non-parenteral multi-particulate formulations comprise biologically active substances bound to carrier particles for delivery across mucosal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Transport; membrane; cytostatic; virucide; vasotropic; dermatological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antipsoriatic; antiasthmatic; gene therapy; tumor cell; antisense; tumor therapy; drug; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
'note= "2'-0-methoxyethyl nucleoside"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                   Teng C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Anti-CMV oligonucleotide SEQ ID 12.
                                                                                                                                                                                                                                                  Mehta RC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGGATGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCAAGAAGAGGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                              Claim 4; Page 8; 38pp; English.
                                       /mod_base= m5c
                                                                                  /mod_base= m2c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                  23-FEB-2000; 2000WO-US004662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%;
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                                                                  /*tag= i
                          *tag= h
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 85.0
les 17; Conservative
                                                                                                                                                                                                                                                Tillman LG,
                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                            WPI; 2000-572032/53
                                                                                                            WO200050050-A1
                                                     modified_base
                                                                                                                                                                                             23-FEB-1999;
             modified base
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                                                                                                                                        31-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     formulation
                                                                                                                                                                                                                                                   Hardee GE,
                                                                                                                                                                                                                                                                                                                                      membranes.
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Gaps

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This invention describes a novel conjugate (1) which consists of (A) a molecule to be transported and (B) at least one aryl residue of formula - Ar (X-(X)-R_1) n (II). Ar = group containing at least one aromatic ring; X = O or N (sic); Y = O; NH-R_2 (sic); R_1 = optionally substituted 1-18C alkyl (optionally containing double and/or triple bonds); n = integer of l or more. (A) is bonded to (B) directly or triple bonds; n = integer of l or more. (A) is bonded to (B) directly or via a chemical group, provided that the chemical group is other than CH_2 cf. if the bond is via a phosphodiester linkage of (A). The invention also describes (i) the preparation of a conjugate (I') of (A') a molecule to be transported and (B') at least one aryl residue (not restricted to comparation of a conjugate (I') of (A') a molecule to comparating (B') and reacting (B') and reacting (B') and (ii) the use of aryl groups (II) (optionally bonded via a chemical comparation of a caross biological membranes. The products of the invention have cytostatic, virucide, vasotropic, dernatological, aritipsoriatic and antiasthmatic activity and can be used for generation of (A) with (B) is useful for transporting (A) across biological membranes or into eukaryotic or prokaryotic cells (specifically bacterial, yeast or mammalian cells, including human cells, containing (I) are also claimed. Typically (I) are altients or containing viral infections or diseases associated with integring or cell-incorpic virialists or cell-incorp cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ hybridization. Conjugation with (B) markedly improves the cellular uptake of (A), e.g. in tumor cells. (B) include fluorescein derivative residues, in which case the conjugates (I) are fluorescently labeled, allowing microscopic monitoring of cellular uptake etc. The cellular uptake of (I) is superior to that obtained using other conjugated groups related to (II); e.g. oligonucleotides conjugated with fluorescein diacetate (within the scope of (B)) have superior uptake to corresponding fluorescein Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds. Gaps New substituted aryl conjugates of parent molecules, especially oligonuclectides, having improved transmembrane and intracellular transport properties, useful as medicaments or diagnostic agents. . 0 0.9%; Score 15.2; DB 1; Length 21; 35.0%; Pred. No. 6e+02; Ive 0; Mismatches 3; Indels Schwerdel M; Seguence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other; Human gene single nucleotide polymorphism #1982. Gothe G, 130 CGGATGAAGAAGATCAAACG 149 Unger E, Disclosure; Page 6; 28pp; German. (AVET) AVENTIS PHARMA DEUT GMBH 21 CGCAAGAAGAAGAACG 2 AAF97221 standard; DNA; 21 BP 85.0%; (first entry) 17; Conservative Greiner B, WPI; 2001-203679/21 Local Similarity 06-JUN-2001 Uhlmann E, AAF97221; Query Match RESULT 435 Matches AAF9722 à qq

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The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also correlations to diseases. The present sequence is an example of one of the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                             /*tag= a
/standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 7 A; 2 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human gene single nucleotide polymorphism #132
                                                                                                                                                                                                                                                                                       (WHED ) WHITEHEAD INST BIOMEDICAL RES. (MILL-) MILLENNIUM PHARM INC.
                                             Location/Qualifiers
replace(11,G)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example; Page 183; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 ATATTTGCCATAGAGGAGAT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF95371 standard; DNA; 21 BP
                                                                                                                                                                                          37-SEP-2000; 2000WO-US024503
                                                                                                                                                                                                                          99US-0153357P
                                                                                                                                                                                                                                      2000US-0220947P
                                                                                                                                                                                                                                                        16-AUG-2000; 2000US-0225724P
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                                                                                                                                                                                                                                                                                                                                       Lander ES, Gargill M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-226749/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                      atherosclerosis.
                                                                                                                            WO200118250-A2
                                                                                                                                                                                                                          10-SEP-1999;
                                                                                                                                                                                                                                           26-JUL-2000;
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                Homo sapiens
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                                               Key
Variation
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disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also useful in forensics, paternity testing, genetic analysis and phenotype correlations to diseases. The present sequence is an example of one of the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various oblymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart
                                                                                                                                                                                                                                                               Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                        Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SB.
                 /*tag= a
/standard_name= "single_nucleotide_polymorphism"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Phosphorothioate; anti-viral therapy; stereochemical pathway;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      / Match 0.9%; Score 15.2; DB 1; Length 21; Local Similarity 85.0%; Pred. No. 6e+02; Loss 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                               Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
/note= "All bases are phosphorothioate"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 21 BP; 6 A; 6 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                               Gargill M, Ireland JS, Bolk S,
                                                                                                                                                                                                                  (WHED ) WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1267 ACTGAGGAGACGTGGCCAGG 1286
                                                                                                                                                                                                                                                                                                                                                                                                     Example; Page 57; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAGAAGAGACGTGGCCCGG 21
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/mod_base= OTHER
replace (11,T)
                                                                                                                                                   10-SEP-1999; 99US-0153357P.
26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-0225724P.
                                                                                                                       07-SEP-2000; 2000WO-US024503
                                                                                                                                                                                                                                (MILL-) MILLENNIUM PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAH46453/c
ID AAH46453 standard; DNA; 21
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                                                                                                                                                                                                                                                                                              WPI; 2001-226749/23
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                                                                                                                                                                                                                                                                                                                                                                        atherosclerosis.
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modified base
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                                                                                          15-MAR-2001
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 Variation
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Matches
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Mccarthy JJ;

Daley GQ,

Bolk S,

Ireland JS,

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Gaps

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3; Indels

0; Mismatches

0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02;

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WPI; 2001-049743/06.
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                                                                                                                                                                                                                                                                                                                                                                                                   Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                                                                                                                                                                                                                                                                               Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-APR-2000;
                                                                                                                                                                                                                                                                                                     15-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-OCT-2001
                                                                                                                                                                                                                                                                                  ABL01595;
                                                                                                                                                       Query Match
                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                           RESULT 439
                                                                                                                                                                                                                                                      ABL01595/
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                                                                                                                                                                      The present invention relates to a method for preparing phosphorothioate oligonucleotides having at least one nucleoside with a 2' modification. The method comprises phosphitylating the 5'-hydroxyl of a nucleic acid group having at least one nucleoside with a 2' modification in an acetonitrile. The present sequence was used to illustrate the method of the present invention. The method is useful for synthesising sulphurised 2' substituted phosphorothioate oligonucleotides, which may be used in molecular biological research, in applications such as anti-viral therapy, and for determining the stereochemical pathways of certain
                                                                                                                 Preparing sulfurized 2' substituted phosphorothioate oligonucleotides useful in biological research, comprises phosphitylating the 5'-hydroxyl of a nucleic acid having a nucleoside with a 2' modification.
                                                                                                                                                                                                                                                                                                                        Gaps
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0
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                                                                                                                                                                                                                                                                                                    0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                  Seguence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Modified phosphorothioate 21-mer SEQ ID NO: 3.
                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                           Cheruvallath ZS;
                                                                                                                                                                                                                                                              enzymes which recognise nucleic acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cole DT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                          130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                            CGCAAGAAGAAGAACG 2
                                                                                                                                                        Example 5; Col 6; 7pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-MAY-2000; 2000WO-US012447.
                   11-JAN-2000; 2000US-00481486.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-00306278
                                      97US-00950779
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AAC88207 standard; DNA; 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                        Conservative
                                                                           Ravikumar VT,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                         (ISIS-) ISIS PHARM INC
                                                                                               WPI; 2001-407218/43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atherosclerosis; ss
                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
modified_base
                                      15-OCT-1997;
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 05-JUN-2001
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                                                                           Cole DL,
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 438
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                                                                                                                                                          The present invention provides novel compositions comprising phosphoramidite compounds which can be used to synthesise modified oligonucleotides have phosphorothioate backbones. They can be used to produce probes, primers, linkers, adaptors and gene fragments and in disease diagnosis and therapy, for example in the treatment of AIDS and atherosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New peptide nucleic acid derivatives, useful e.g. for tumor treatment and diagnosis, contain terminal, deprotonizable phosphoryl groups for e.g. improved solubility.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= a
/note= "This sequence is a peptide nucleic acid, i.e. it
contains a polyamide backbone instead of a deoxyribose
backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "linked to one of the peptides shown in ABB04517 and ABB04518 to form a PNA-peptide conjugate"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide nucleic acid; PNA; cytostatic; virucide; dermatological; antiasthmatic; overexpression; viral infection; vitiligo; antisense; pigmentation disorder; asthma; polyamide backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 ;
Preparation of oligonucleotides useful in diagnostics using
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.2; DB 1; Length 21; llarity 85.0%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CMV targeted antisense peptide nucleic acid SEQ ID NO: 1.
                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 18; 93pp; German.
                                                                                                Example 7; Page 44; 75pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130 CGGATGAAGAAGATCAAACG 149
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/mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                              phosphoramidite compositions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-APR-2001; 2001WO-EP004030.
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*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
Les 17; Conserv
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10017621-381.rng

ABK99295 standard; RNA; 21 BP.

RESULT 441

ABK99295/

ABK99295

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The present invention relates to peptide nucleic acid (PNA) derivatives having at the C-, and optionally N-, terminus one or more phosphoryl groups, at least one of which contains one or more deprotonisable groups, preferably hydroxy or mercapto. These PNAs are useful in the treatment of tumours or any disease associated with (over) expression of particular genes, including viral infections, vitiligo or other pigmentation disorders, and asthma. The present sequence is a peptide nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to peptide nucleic acid (PNA) derivatives. These can be used in the treatment of cancer, viral infections, vitiligo or other pigmentation disorders, and asthma. The present sequence is an oligonucleotide fragment of a PNA described in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New peptide nucleic acid derivatives, useful e.g. for treating tumors and diagnosis, have N-terminal phosphoryl residue for improving e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide nucleic acid; PNA; polyamide backbone; phosphoryl radical; cytostatic; virucide; dermatological; antiasthmatic; cancer; antisense; viral infection; vitiligo; pigmentation disorder; asthma; ss.
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                                                                                                                                                                                                          DB 1; Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CMV targeted antisense peptide nucleic acid SEQ ID NO: 1.
                                                                                                                                                                                                                                                 3; Indels
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                                                                                                                                                                       Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                  described in the exemplification of the invention
                                                                                                                                                                                                        Query Match
0.9%; Score 15.2; DB 1
Best Local Similarity 85.0%; Pred. No. 6e+02;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 74; 96pp; German.
                                                                                                                                                                                                                                                                                    130 CGGATGAAGAAGATCAAACG 149
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                                                                                                                                                                                                                                                                                                                       21 CGCAAGAAGAAGAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .8-APR-2000; 2000DE-01019136.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-APR-2001; 2001WO-EP004027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Breipohl G,
                                                                                                                                                                                                                                                                                                                                                                                                                  ABA97455 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-089643/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        solubility in water.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best_Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200179249-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Uhlmann E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABA97455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                 ABA97455,
                                                                                                                                                                                                                                                                                                                                                                                 RESULT
   8888888888
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel replicase complex comprising hepatitis C virus NSSB replicase, a 3 nucleotide-long template to which a 2 nucleotide-long primer is annealed, and template and primer which do not form a stable duplex in the absence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               screening assays which are used for determining kinetic, thermodynamic and mechanistic properties of NS5B replication and ultimately in the development of inhibitors of NS5B. Newly identified inhibitors of replicase activity may be used for developing anti-HCV pharmaceuticals. Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                          Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
                                                                                                                             Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 7 A; 14 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 231 TGGTGGTGGTGGCGCAGTG 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example; Page 6; 17pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 recreerecreerecre
                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhong W, Hong Z, Ferrari E;
                                                                                                                                                                                                                                                                                 06-APR-2001; 2001US-00828034.
                                                                                                                                                                                                                                                                                                                      07-APR-2000; 2000US-0195852P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ch 0.9%;
.1 Similarity 85.0%;
17; Conservative
                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-582330/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                 (FERR/) FERRARI E.
                                                                                                                                                                                                                                                                                                                                                            (ZHON/) ZHONG W.
                                                                                                                                                                                                      US2002064771-A1.
                                                                                                                                                                                                                                                                                                                                                                                  HONG Z.
                                                       21-OCT-2002
                                                                                                                                                                                                                                              30-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of HCV NS5B
                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                  (HONG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 442
g
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ABK99280 standard; RNA; 21

ABK99280/

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Gaps

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130 CGGATGAAGAAGATCAAACG 149

ò

CGCAAGAAGAAGAGCAAACG 2

21

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Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3 nucleotide-long template to which a 2 nucleotide-long primer is annealed, and template and primer which do not form a stable duplex in the absence
                                     Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #10.
                                                    Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase
                                                                                                                                                                                                                                                    Example; Page 6; 17pp; English.
                                                                                                                  06-APR-2001; 2001US-00828034
                                                                                                                                  07-APR-2000; 2000US-0195852P.
                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-JAN-2003 (first entry)
                                                                                                                                                                                               WPI; 2002-582330/62.
                                                                                                                                                       (HONG/) HONG Z.
(FERR/) FERRARI E.
                                                                                                                                                                               Zhong W, Hong Z,
                                                                                                                                                (ZHON/) ZHONG W.
                                                                                   US2002064771-A1.
                       21-OCT-2002
                                                                                                  30-MAY-2002.
                                                                                                                                                                                                                                     of HCV NS5B
                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                      templates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABV73946
       ABK99280
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABV73946/
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BXXXE
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Ferrari E;

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                                                                                                                                                                                                      replicase activity may be used for developing anti-HCV pharmaceuticals.
                                                                                                                                                                                                                 Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                        0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                    Sequence 21 BP; 7 A; 14 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                        GTGGTGGTGGTGCCGCCAGT 249
                                                                                                                                                                                                                                                                                                                                        GIGGIGGIGGIGGIGGI
                                                                                                                                                                                                                                                                                                                                                                                                        BP,
                                                                                                                                                                                                                                                                                      85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                    ABV73946 standard; DNA;
                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 17; Conserv
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.; 0

ABV73950 standard; DNA; 21 BP

(first entry)

13-JAN-2003

ABV73950;

RESULT 444
ABV73950/c
ID ABV7395
XX
AC ABV7395
DT I3-JANXX

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The present sequence is that of antisense oligomucleotide (ODN) 5114

(Formiversen 13312 ISIS), which was used in an example of the invention in which methylated CpG-like oligomucleotides were compared with unmethylated ODNs for their immunostimulant activity. ODN 5114 exhibited significant stimulatory capability on human B cells, and its corresponding methylated form, ODN 5154 (see ABV73595) also induced stimulation, although to a lesser extent. Methylated CpG, CpI and ZpY ODNs of the invention (see ABV73935.37) are useful for inducing an immune response in a subject, including humans, for the treatment or prevention of an infectious disease, cancer, allergy or asthma, for enhancing or stimulating bone marrow proliferation in an immunodeficiency, particularly in a subject undergoing chemotherapy, for enhancing crythropoiesis in anaemia, for enhancing thrombopoiesis in thrombocytopaenia, for enhancing neutrophil proliferation in neutropaenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL neutropaenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL continued of the con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          useful for treating or preventing infectious diseases, cancer, allergy, asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New compositions comprising CpG-like immunostimulatory nucleic acids, useful for treating or presenting factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                       Immunostimulant; infection; allergy; asthma; cancer; anaemia;
thrombocytopaenia; neutropaenia; antimicrobial; antiasthmatic;
cytostatic; antianaemic; antiallergic; haemostatic; antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                  /note= "phosphorothioate linkage"
                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 89; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                 1. .21
/*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cecaagaagaagcaaace 2
                         Antisense oligonucleotide 5114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (COLE-) COLEY PHARM GROUP LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-DEC-2000; 2000US-0254341P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LO-DEC-2001; 2001WO-IB002888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             production (all claimed)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Vollmer J;
                                                                                                                                                             phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-723213/78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200269369-A2
                                                                                                                                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Schetter C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-SEP-2002.
                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
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; 0

Gaps .

Indels

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6e+02;

Pred. No. 6e+C 0; Mismatches

Best Local Similarity 85.0%; Matches 17; Conservative

8

g

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Query Match
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Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Length 21;

DB 1;

0.9%; Score 15.2;

immunodeficiency, particularly in a subject undergoing chemotherapy, for enhancing erythropoiesis in anaemia, for enhancing thrombopoiesis in thrombocytopaemia, for enhancing neutrophil proliferation in neutropaemia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL p. (1L-12, IL-18, TNF, interferon-alpha or interferon-gamma)

```
The present sequence is that of methylated oligonucleotide (ODN) 5154, a methylated version of antisense ODN 5114 (see ABV73946), which was used in an example of the invention in which methylated Cp6-like ODNs were compared with unmethylated ODNs for their immunostimulant activity. ODN 5114 exhibited significant stimulatory capability on human B cells. ODN 5154 also induced stimulation, although to a lesser extent. Methylated CpG, CpI and ZpY ODNs of the invention (see ABV73935-7) are useful for inducing an immune response in a subject, including humans, for the treatment or prevention of an infectious disease, cancer, allergy or asthma, for enhancing or stimulating bone marrow proliferation in an analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New compositions comprising CpG-like immunostimulatory nucleic acids, useful for treating or preventing infectious diseases, cancer, allergy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
                       Immunostimulant; infection; allergy; asthma; cancer; anaemia; thrombocytopaenia; neutropaenia; antimicrobial; antiasthmatic; cytostatic; antianaemic; antiallergic; haemostatic; antisense;
                                                                                                                                                                        note= "phosphorothioate linkage"
Methylated antisense oligonucleotide 5154.
                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 89; 148pp; English
                                                                                                                                                            base= OTHER
                                                                                                                                                                                                                                                                                 /*tag= d
/mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= g
/mod_base= m5c
                                                                                                                                                                                                              mod_base= m5c
                                                                                                                                                                                                                                                        mod_base= m5c
                                                                                                                                                                                                                                                                                                                                  mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                                             /mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (COLE-) COLEY PHARM GROUP LID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0254341P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-DEC-2001; 2001WO-IB002888.
                                                                                                                                                                                                                                                                                                                         Φ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vollmer J;
                                                                                                                                              *tag=
                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                                                *tag=
                                                                                                                                                                                                   *tag=
                                                                                                                                                                                                                                          *tag=
                                                                                                                                                                                                                                                                                                                        *tag=
                                                                                                                                                            pom/
                                                                 phosphorothioate; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-723213/78.
                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200269369-A2
                                                                                                                                                                                                                                                                    modified base
                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                  modified_base
                                                                                                                                                                                                                                                                                                                                                                                        modified base
                                                                                                                                 modified_base
                                                                                                                                                                                                                             modified base
                                                                                                                                                                                     modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Schetter C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-SEP-2002
                                                                                            Synthetic.
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PKC antisense oligonucleotide; protein kinase C; PKC, alpha; PKC-beta type I; PKC-beta type II; PKC-gamma; PKC-delta; PKC-epsilon; PKC-seta; PKC-eta; PKC expression modulation; ss; hyperproliferative condition; tumour; glioblastoma; bladder cancer; breast cancer; colon cancer; lung cancer; inflammatory condition; psoriasis; phosphorothioate backbone; hepatitis C virus; HCV; ICAM-I;

cytomegalovirus; CMV

Unidentified US6339066-B1

Cytomegalovirus (CMV) treatment oligonucleotide.

(first entry)

27-MAY-2002

ABL90981;

BP

ABL90981 standard; DNA; 21

RESULT 445 ABL90981/c

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encoding a human protein kinase C (PKC) isoform (i.e. PKC-alpha, PKC-beta type I, PKC-beta type II, PKC-gamma, PKC-delta, PKC-epsilon, PKC-zeta, than antisense oligonucleotides of the invention are useful for modulating the expression of the PKC isoforms. The antisense oligonucleotides are useful for treating hyperproliferative conditions (e.g. tumour, glioblastoma, bladder cancer, breast cancer, colon cancer and lung cancer), and inflammatory conditions (e.g. psoriasis). The antisense oligonucleotides of the invention are also useful for detection and diagnosis of PKC expression. The present sequence represents an antisense oligonucleotide described in the invention. NOTE: The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotide having nucleoside units which specifically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention comprises antisense oligonucleotides designed to bind mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    binds mRNA encoding human protein kinase C isoform, useful for treating hyperproliferative and inflammatory diseases e.g. psoriasis, tumor and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 contains a phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 19; Col 25; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-215022/27.
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Ö Hoke

Cook PD,

Dean NM,

Bennett CF,

(ISIS-) ISIS PHARM INC

91US-00777760. 91US-00777007. 92US-00852852. 93US-00058023. 94US-00297703. 95US-00481066.

05-MAY-1993 09-JUL-1993 29-AUG-1994 07-JUN-1995

90US-00463358. 90US-00566977. 91WO-US000243.

15-OCT-1991; 16-OCT-1991; 16-MAR-1992; 11-JAN-1991;

97US-00829637

31-MAR-1997;

15-JAN-2002

Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

Tue Nov

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New human colocarcinoma-originated G protein-coupled receptor protein for developing drugs e.g. with transgenic animals to treat diseases of the central nervous system, endocrine diseases and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a novel colocarcinoma-originated G protein-coupled receptor protein. The protein and encoded DNAs are for diagnosis and developing drugs e.g. with transgenic animals to treat diseases of the central nervous system, endocrine and metabolic diseases, and cancer, including by gene therapy. ARK69599-ABK69646 represent G protein-coupled receptor protein coding sequences and related primers of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                               Gaps
                                                                                                                                                                                                                                                                   G protein coupled receptor; nootropic; neuroprotective; cytostatic; transgenic; central nervous system disorder; endocrine disorder; metabolic disease; cancer; gene therapy; colocarcinoma; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
  Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Indels
                            3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel G protein-coupled receptor, PCR primer #10.
Score 15.2; DB 1;
Pred. No. 6e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                          Novel G protein-coupled receptor, PCR primer #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yoshimura K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2; Page 168; 210pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Miyajima N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAGGTGCAGTCTCCAGTGA 415
                                                         130 CGGATGAAGAAGATCAAACG 149
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                                                                                    cechachachachace 2
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                                                                                                                                                           BP.
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 0.9%;
85.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     13-OCT-2000; 2000JP-00313533
16-NOV-2000; 2000JP-00350057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TAKE ) TAKEDA CHEM IND LID
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                                                                                                                                                                                                               (first entry)
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Best Local Similarity 85...
17; Conservative
                               17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABK69614 standard; DNA;
                                                                                                                                                           ABK69603 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shintani Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-362679/39
               Best Local Similarity
Matches 17; Conser
                                                                                                                                                                                                                                                                                                                                                     WO200231145-A1
                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-JUL-2002
                                                                                                                                                                                                               15-JUL-2002
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                                                                                                                                                                                      ABK69603;
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ID ABK6
XX ABK6
AC ABK6
DT 15-J
XX DT 15-J
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New human colocarcinoma-originated G protein-coupled receptor protein for developing drugs e.g. with transgenic animals to treat diseases of the central nervous system, endocrine diseases and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel colocarcinoma-originated G protein-coupled receptor protein. The protein and encoded DNAs are for diagnosis and developing drugs e.g. with transgenic animals to treat diseases of the central nervous system, endocrine and metabolic diseases, and cancer, including by gene therapy. ASK69599-ASK69646 represent G protein-coupled receptor protein coding sequences and related primers of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligomeric synthesis method, diagnostic, therapeutic, antisense agent, antiviral agent; competitive inhibitor; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
              protein coupled receptor; nootropic; neuroprotective; cytostatic;
                        transgenic, central nervous system disorder, endocrine disorder, metabolic disease, cancer, gene therapy, colocarcinoma, primer, ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligomeric compound synthesis method associated polynucleotide #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.9%; Score 15.2; DB 1; Length 21;
llarity 85.0%; Pred. No. 6e+02;
Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                   Yoshimura K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cole DL;
                                                                                                                                                                                                                                                                                                                                                                                        Example 6; Page 182; 210pp; Japanese.
                                                                                                                                                                                                                                                                   Miyajima N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  396 TGAGGTGCAGTCTCCAGTGA 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 recercasercrecaeres 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВР
                                                                                                                                                                                          13-OCT-2000; 2000JP-00313533.
16-NOV-2000; 2000JP-00350057.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-00111678.
99US-00349659.
                                                                                                                                                                12-OCT-2001; 2001WO-JP008977.
                                                                                                                                                                                                                                      (TAKE ) TAKEDA CHEM IND LTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                   Shintani Y,
                                                                                                                                                                                                                                                                                               WPI; 2002-362679/39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
les 17; Conserv
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                                                                                                     WO200231145-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-NOV-2002
                                                                                                                                  18-APR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                     Sato S,
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Matches
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WPI; 2002-589134/63

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oligomeric compounds are useful e.g. as oligonucleotides or oligonucleotide analogues in diagnostics, therapeutics and as research agents. Oligonucleotides and their analogues have been used in molecular biology as probes, primers, linkers, adapters and gene fragments. They may also be useful as antisense agents for various disease states, e.g. antiviral agents, or as competitive inhibitors of transcription factors to modulate their action. Oligonucleotides and their analogues have also been used as direct and indirect regulators of protein, in diagnostic hybridisation techniques, and as primers in PCR reactions. This sequence represents a synthetic polymucleotide created using the oligomeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention describes oligomeric compounds containing a moiety. The oligomeric compounds are useful e.g. as oligomerlectides or oligomucleotide analogues in diagnostics, therapeutics and as research agents. Oligomucleotides and their analogues have been used in molecular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New oligomeric compounds containing e.g. phosphite, phosphodiester and phosphorothioate linkages, useful as oligonucleotides or analogs in diagnostics, therapeutics and as research agents.
                                                     and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligomeric synthesis method; diagnostic; therapeutic; antisense agent; antiviral agent; competitive inhibitor; ss.
                                                                                                                                                             The invention describes oligomeric compounds containing a moiety. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                   New oligomeric compounds containing e.g. phosphite, phosphodiester a
phosphorothioate linkages, useful as oligonucleotides or analogs in
diagnostics, therapeutics and as research agents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligomeric compound synthesis method associated polynucleotide #7.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                 compounds synthesis method described in the invention
                                                                                                                                                                                                                                                                                                                                                                                                    Seguence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cole DL;
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                                                                                                                         Example 11; Page 20; 33pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ravikumar VT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCAAGAAGAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-DEC-2001; 2001US-00016465.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-00111678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-00349659
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-589134/63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cheruvallath ZS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS2002055623-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-JUL-1998;
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Matches
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biology as probes, primers, linkers, adapters and gene fragments. They may also be useful as antisense agents for various disease states, e.g. antiviral agents, or as competitive inhibitors of transcription factors to modulate their action. Oligonucleotides and their analogues have also been used as direct and indirect regulators of protein, in diagnostic hybridistation techniques, and as primers in PCR reactions. This sequence represents a synthetic polymucleotide created using the oligomeric compounds synthesis method described in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel isolated or substantially purified Von Willebrand factor-cleaving protease, useful for producing preparation for therapy of thrombosis and thromboembolic disease such as thrombotic thrombocytic purpura.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, Von Willebrand factor-cleaving protease, vWF-cp, therapy; enzyme; transgenic animal; immunisation; thromboembolic disease; preeclampsia; thrombotic thrombocytic purpura; TTP, Henoch-Schonlein purpura; thrombosis; neonatal thrombosypaenia; haemolytic-uraemic syndrome; transgenic; anticoagulant; RT-PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Von Willebrand factor-cleaving protease cloning PCR primer, 6278.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       thromboembolic disease such as thrombotic thrombocytic purpura (TTP), Henoch-Schonlein purpura, preeclampsia, neonatal thrombocytopaenia or haemolytic-uraemic syndrome. vWF-cp can also be used for processing
                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                              0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
rative 0; Mismatches 3; Indels
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r F, Antoine G, Kerschbaumer R, Tagliavacca
K, Voelkel D;
                                                                                                                                                                                             Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 3; Page 34; 93pp; English.
                                                                                                                                                                                                                                                                                                                        130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                               21 CGCAAGAAGAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
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12-APR-2001; 2001US-00833328.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAD39344 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BAXT ) BAXTER AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200242441-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scheiflinger F
Zimmermann K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAD39344;
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Sequence 21 BP; 5 A; 4 C; 9 G; 3 T; 0.U; 0 Other;

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Gaps

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plasmatic or recombinantly produced vWF. The invention is useful for construction expression systems and generating transgenic animals which express the polypeptide in vivo. The present sequence is human vWF-cp gene cloning RT-PCR primer
                                                                                                                                                                                                                                                          Single Primer Amplification; nested oligonucleotide extension reaction;
                                                                     Score 15.2; DB 1; Length 21; Pred. No. 6e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 Lin Y, Mcwhirter J,
                                                                                                                                                                                                                                      Human light chain lambda gene related oligo SEQ ID No 165
                                                  Sequence 21 BP; 2 A; 8 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                  Bowdish KS, Barbas-Frederickson S,
                                                                                                            509 GCTACCTGGAGAAGCTGACC 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 6; Page 35; 54pp; English
                                                                                                                              ecreceregregadereace 21
                                                                                                                                                                               BP.
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19-SEP-2001; 2001US-0323400P
                                                                                                                                                                                                                                                                                                                                                10-DEC-2001; 2001WO-US047727
                                                                     Query Match 0.9%;
Best Local Similarity 85.0%;
Matches 17; Conservative
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                                                                                                                                                                                                                                                                    library; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                (ALEX-) ALEXION PHARM INC.
                                                                                                                                                                              ABT06151 standard; DNA;
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                                                                                                                                                                                                                                                                                                         WO200248401-A2.
                                                                                                                                                                                                                                                                    hairpin; SPA;
                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                    28-OCT-2002
                                                                                                                                                                                                                                                                                                                             20-JUN-2002.
                                                                                                                                                                                                ABT06151;
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The invention relates to a method for amplifying a nucleic acid using Single Primer Amplification (SPA). The method comprises synthesising a template mucleic acid containing a predetermined sequence and hairpin structure with the nested oligonuclectide extension reaction. The method is useful for amplifying a nucleic acid, preferably for amplifying a family of related micleic acid sequences to build a complex library of polypeptides encoded by the sequences. The engineered nucleic acid strand by providing a nucleic sold with a predetermined sequence engineered nucleic acid strand sequence complementary to the predetermined sequence and a hairpin structure between them and contacting the engineered nucleic acid strand with a primer containing at least a portion of the predetermined sequence. This process is done in the presence of a polymerses and nucleotides under conditions suitable for polymerisation to produce a complementary nucleic acid strand. The method of the invention is useful complementary nucleic acid strand. The method of the invention is useful sequence large and polymerisation to produce a complexing simultaneously more than one different target nucleic acid sequence located on the same or different nucleic acid molecules. This polymerise process is an opigonucleotide relating to the the template for Amplifying nucleic acid by synthesizing template nucleic acid containing a predetermined sequence and hairpin structure and using target amplification by Single Primer Amplification. invention

ACC49160/c RESULT 453

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Method for preparation of oligomeric compounds, useful for modulating RNA or DNA which code for a protein, in diagnostics and therapeutics and as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention discloses a method for preparation of oligomeric compounds having phosphite, phosphodiester, phosphorothicate, phosphorothicate or other linkages. The method is useful for preparing oligomeric compounds which are used to modulate RNA or DNA which code for a protein. They can be used in diagnostics, therapeutics (e.g. gene therapy) and as research reagents. The sequence presented is the phosphorothicate oligomucleotide
                                                                                                                                                                                                                                                                                   ss; oligomeric compound; phosphite; phosphodiester; phosphorothioate; phosphorodithioate; diagnostic; therapeutic; gene therapy.
                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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0
0.9%; Score 15.2; DB 1; Length 21; 55.0%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
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Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                         /*tag= a
/mod_base= OTHER
/note= "OTHER= phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #3, which was synthesised in an example of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                       Synthetic phosphorothioate oligonucleotide #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cole DL,
                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                               634 CTGGGCGAGGGTACCTATGC 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 11; Col 33; 31pp; English.
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                                                                                       1 credeadaddaakcererec 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cheruvallath ZS, Ravikumar VT,
                                                                                                                                                                 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.9%;
                85.0%;
                                                                                                                                                                 ABX10631 standard; DNA; 21
                                                                                                                                                                                                                            (first entry)
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Best Local Similarity 85.0
Matches 17; Conservative
                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-730487/79
                Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         research reagents.
                                                                                                                                                                                                                                                                                                                                                             Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-JUL-1998;
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                                                                                                                                                                                                                          15-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-JUN-2002
                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                              ABX10631;
    Query Match
                                                                                                                                     RESULT 452
                                                                                                                                                   ABX10631
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Maruyama T;

21 CGCAAGAAGAAGAGCAAACG

ABX10710 standard; DNA; 21

RESULT 454

ABX10710

(first entry)

Page 237

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The present invention describes an oral pharmaceutical formulation (I) for delivering a bioreactive macromolecule to a mucosal surface. (I) comprises a first population of carrier particles comprising drug and a bioadhesive compound; and a second population of carrier particles comprising a penetration enhancer. Also described is a method for enhancing the mucosal absorption of the bioactive macromolecule in a mammal (preferably a human) by mucosally administering (I). (I) has antiuleer, antiinflammatory, antirheumatic, antiarthritic and cytostatic activities. (I) can be used for delivering a bioreactive macromolecule to a mucosal surface. It is used for the oral delivery of a drug to an annimal encompassing a human as well as other mammals, reptiles, fish, amphibians and birds. It is used to deliver drugs including peptides, proteins, monoclonal antibodies their fragments, nucleic acids (DNA and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  suffer from any disease treatable with the inventive composition, e.g. ulcerative collitis, rheumatoid arthritis, Crohn's disease, inflammatory bowel disease, or undue cellular proliferation (cancers and tumours). The present sequence represents an exemplary oligonucleotide from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oral pharmaceutical formulation for delivering bioreactive macromolecule to mucosal surface, contains drug, bioadhesive compound, and penetration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RNA), oligonuclectides, antisense oligonuclectides, and small molecules. It can be used to examine the function of various proteins and genes in an animal, including those that are essential to animal development. It can be used for the treatment of animals that are known or suspected to
                                                                                                                                                                                       enhanced mucosal drug absorption; antiulcer; antiinflammatory; cancer; antirheumatic; antiarthritic; cytostatic; ulcerative colitis; tumour; rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;
                                                                                                                                                                   Inhibition; antisense oligonucleotide; phosphorothioate; bioadhesive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 85.0%; Pred. No. 6e+02; Similarity 85.0%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                         HCMV inhibitory antisense oligonucleotide SEQ ID NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention, which can be used to inhibit HCMV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure, Page 28; 62pp, English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-AUG-2002; 2002WO-US026925.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-AUG-2001; 2001US-00935316.
ACC49160 standard; DNA; 21
                                                                                                                                                                                                                                                        cellular proliferation; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Weinbach SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-342432/32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003018134-A2
                                                                                                                                                                                                                                                                                                                                       Key
modified_base
                                                                                 19-JUN-2003
                                                                                                                                                                                                                                                                                                Synthetic.
                                          ACC49160;
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GE

Hardee

Geary RS,

Tillman LG,

/note= "phosphorothioate linkages"

/mod_base= OTHER

..21 *tag=

Location/Qualifiers

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The invention relates to an isolated glycoprotein hormone Zlut1 sequence, the mature protein or antigenic peptides derived from Zlut1. Also included are an isolated polynuclectide encoding Zlut1, an isolated antibody that specifically binds to Zlut1, treating hyperthyroidism in female mammals by administering Zlut1 and a pharmacentical composition comprising Zlut1. Zlut1 is useful for manufacturing a medicament for treating hyperthyroidism. Anti-Zlut1 antibodies can be used to detect Zlut1 in tissue sections from a biopsy specimen or to screen biological samples in vitro for the presence of Zlut1. Zlut1 is useful for treating women with hyperthyroidism. The nucleic acid molecules are useful for detecting the expression of a Zlut1 gene in a biological sample. The use as a probe for detecting Zlut1 genemic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  New Zlutl polypeptides and polynucleotides, useful for manufacturing medicament for treating hyperthyroidism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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0
                                                                                                        Human, ss; PCR; Zlutl, glycoprotein hormone, hyperthyroidism; antithyroid; chromosome 14q23.3; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seguence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
                                                                           Human glycoprotein hormone Zlutl PCR primer #6.
                                                                                                                                                                                                                                                                                                                                                                                          Thayer EC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 4; Page 45; 51pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              163 ACACTCCGAGGTGGCCGAGG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 ACACTCCGTGGTGGCAGTGG 21
                                                                                                                                                                                                                                                 30-AUG-2001; 2001US-00943388.
                                                                                                                                                                                                                                                                              25-APR-2000; 2000US-0199498P.
20-APR-2001; 2001US-00839706.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 85.vv,
-hes 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                          Webster PJ,
                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                             (HOLL/) HOLLOWAY J L.
                                                                                                                                                                                                                                                                                                                                          WEBSTER P J.
THAYER E C.
                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-209228/20.
                                                                                                                                                                                     US2002160953-A1
                                                                                                                                                                                                                                                                                                                                                                                        Holloway JL,
                                                                                                                                                        Homo sapiens
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                                             15-APR-2003
                                                                                                                                                                                                                    31-OCT-2002
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                ABX10710;
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Gaps

Human IE-2 antisense oligonucleotide

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The invention relates to a novel compound comprising an optionally stabilised nucleic acid or its analogue encoding a peptide, protein or other blological modifier, aptemer, antisense sequence, or antisense confortal modifier, aptemer, antisense sequence, or antisense compound a linker to a ligand for the cranscobalamin receptor or intrinsic factor receptor. A compound of the invention has cytostatic, antiviral, anti-HIV, hepatotropic, antinflammatory, virucide, tuberculostatic, and protozoacide activity. The compounds may be useful in the manufacture of a medicament for the and modulates a blological process, in medical therapy A compound is also useful for treating cancer, viral diseases such as infection caused by HIV, hepatitis (hepatitis B, hepatitis C and hepatitis D), herpes, TB, Epstein-Barr virus, malaria, influenza virus, para influenza virus, mumps virus, adenoviruses, recoviruses, respiratory syncytial virus, entroviruses, polioviruses, respiratory syncytial virus, reprire contentitis viruses, recoviruses, rubella virus, contentitis viruses, rubella viruses, rubella virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          molluseum vontagiosum virus, human parvovirus B19, cytomegalovirus, human papillomavirus, varicella zoster, arenaviruses or filoviruses. The present sequence is used in the exemplification of the invention
                                      Human; antisense; transcobalamin receptor; intrinsic factor receptor; cytostatic; antiviral; anti-HIV; hepatotropic; antiinflammatory; virucide; tuberculostatic; protozoacide; cancer; viral disease; ss; IE-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; antisense; transcobalamin receptor; intrinsic factor receptor; cytostatic; antiviral; anti-HIV; hepatotropic; antiinflammatory; virucide; tuberculostatic; protozoacide; cancer; viral disease; ss; IE-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to a ligand for the transcobalamin receptor or intrinsic factor receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Compound useful for treating e.g. cancer comprises optionally stabilized nucleic acid, aptamer, antisense sequence, or antisense mimic conjugated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.2; DB 1; Length 21;
35.0%; Pred. No. 6e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                   (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
                                                                                                                                                                                                                                                                                                                                                                                                           Collins DA, Callstrom M, Prendergast FG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human IE-2 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 88; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21 CGCAAGAAGAAGAGCAAACG 2
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                                                                                                                                                                                                                                                                                                    2001US-0322821P.
2002US-0410627P.
                                                                                                                                                                                                                                                         17-SEP-2002; 2002WO-US029571
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-430085/40
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nes 17; Conserv
                                                                                                                                                                      WO2003025139-A2
                                                                                                                                                                                                                                                                                               17-SEP-2001;
                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                        13-SEP-2002;
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                                                                                                                                                                                                                 27-MAR-2003
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Matches
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ID ACC5
XX
AC ACC5
XX
DT 01-J
DT 01-J
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Huma
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Huma
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The invention relates to a novel compound comprising an optionally stabilised nucleic acid or its analogue encoding a peptide, protein or other biological modifier, aparamer, antisense sequence, or antisense mimic conjugated directly or through a linker to a ligand for the transcobalamin receptor or intrinsic factor receptor. A compound of the invention has extostatic, anti-viral, anti-HIV, hepatotropic, antiinflammatory, virucide, tuberculostatic, and protozoacide activity. The compounds may be useful in the manufacture of a medicament for the call control of an encountry of material that affects gene translation or gene transcription and modulates a biological process, in medical therapy. A compound is also useful for treating cancer, viral diseases such as infection caused by HIV, hepatitis (hepatitis S), hepatitis C and hepatitis D), herpes, TB, Epstein-Barr virus, malaria, influenza virus, para influenza virus, adenoviruses, reoviruses, reoxiruses, coxsackie-viruses, echoviruses, rubella virus, enteroviruses, gastroenteritis viruses, rubella viruses, molluseum vontagiosum virus, human parvovirus B19, cytomegalovirus, human parvovirus B19, cytomegalovirus, papillomavirus, varicella zoster, arenaviruses, of the virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Neuroprotective, vasotropic, gastrointestinal; immunological; cytostatic; GPCR binding modulation; ligand; GPCR; G protein-coupled receptor; binding, central nervous system disorder; circulatory disorder; cancer; digestive disorder; immune system disorder; metabolic disease; human; TGR23-2 ligand; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid, aptamer, antisense sequence, or antisense mimic conjugated to a ligand for the transcobalamin receptor or intrinsic factor receptor.
                                                                                                                                                                                                                                                                                                                                                                      Compound useful for treating e.g. cancer comprises optionally stabilized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         papillomavirus, varicella zoster, arenaviruses or filoviruses. The present sequence is used in the exemplification of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human TGR23-2 ligand related PCR primer SEQ ID NO:34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3;
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                                                                                                                                                                                                                                              (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
                                                                                                                                                                                                                                                                                        Prendergast FG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 87; 156pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 CGCAAGAAGAGAGCAAACG 2
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                                                                                                                                          17-SEP-2002; 2002WO-US029571
                                                                                                                                                                                    17-SEP-2001; 2001US-0322821P
                                                                                                                                                                                                     2002US-0410627P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.9%;
Best Local Similarity 85.0%;
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                        Callstrom M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-MAY-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                 WPI; 2003-430085/40.
                                                        WO2003025139-A2.
                 Homo sapiens.
                                                                                                                                                                                                         13-SEP-2002;
                                                                                                                                                                                                                                                                                        Collins DA,
                                                                                                 27-MAR-2003
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Gaps

Gaps ·.

Homo sapiens

Synthetic.

10017621-3sl.rng

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ligands can have neuroprotective, vasotropic, gastrointestinal, immunological and cytostatic activities, and can be used for modulating g protein-coupled receptor (GPCR) binding. The method can be used for ogpore estimating and presuming ligands or their types directly binding e.g. to GPCR from sequence data, applicable in identifying proteins and analysis of their functions, and in drug development for preventing or treating diseases of the central nervous system, circulatory, disestive and immune systems, cancer, and metabolic diseases. The present sequence represents a PCR primer for human TGR23-2 ligand, which is used in an example from
                                                                                                                                                                                                                                                                                                          Computer-based method for estimating and presuming ligands or their types
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antiviral screening; immunoassay; ss; nuclease inhibitor; gene therapy; AIDS; bacterial infection; viral infection; protozoan infection; abnormal cell proliferation; tumour formation; atherosclerosis.
                                                                                                                                                                                                                                                                                                                                that directly bind to e.g. GPCR from sequence data, applicable in identifying proteins and functional analysis, and in drug development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antiviral screening immunoassay oligonucleotide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                          Example; Page 98; 107pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               396 TGAGGTGCAGTCTCCAGTGA 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCCGTGAAGTCTCCAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACA61364 standard; RNA; 21 BP
                                                                                                     11-JUL-2002; 2002WO-JP007057
                                                                                                                                             12-JUL-2001; 2001JP-00212749
                                                                                                                                                                                  (TAKE ) TAKEDA CHEM IND LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17; Conservative
                                                                                                                                                                                                                             Yamamoto Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the present invention
                                                                                                                                                                                                                                                                    WPI; 2003-229505/22
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                   WO2003007187-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-AUG-2003
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                                                            23-JAN-2003
                                                                                                                                                                                                                             Inooka H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 458
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with RNA or DNA, comprising covalently-bound nucleosides that individually include a ribose of deoxyribose sugar portion and a base portion. The nuclease resistant compounds are useful as therapeutics, diagnostic agents, or research reagents. The compounds are also useful for modulating the activity of an RNA or DNA molecule, or for treating an organism with a disease associated with the undesired production of a protein, e.g. bacterial, viral or protozon infections, AIDS, abnormal cell proliferation and tumour formation, or atherosclerosis. The present sequence represents the antiviral screening immunoassay oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New nuclease resistant compounds, useful as therapeutics, diagnostic agents, or research reagents, or for treating an organism with a disease associated with the undesired production of a protein, e.g. bacterial infections or AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a nuclease resistant compound that hybridises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
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85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                        2'-0-methyl nucleotides"
                                                                                                 /mod_base= OTHER
/note== "OTHER = 2'-O-methyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antiviral screening immunoassay oligonucleotide #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 34; Page 31; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130 CGGATGAAGAAGATCAAACG 149
                                       /mod_base= OTHER
/note= "OTHER = 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 CGCAAGAAGAGAGCAAACG 2
                                                                                                                                                                                                                         90US-00463358.
90US-00566977.
91WO-US000243.
91WO-US005720.
91US-00814961.
                                                                                                                                                                                                                                                                                                                                         94US-00244993.
95US-00471973.
98US-00135202.
                                                                                                                                                                                                                                                                                                             92US-00854634.
                                                                                                                                                                                                 28-NOV-2001; 2001US-00996263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACA61365 standard; RNA; 21
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                                                                                 /*tag= b
                             *tag= a
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Matches 17; Conservative
                                                                     .21
                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                              Kawasaki AM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-438873/41.
                                                                                                                                           US2003004325-A1.
Key
modifed_base
                                                                     modifed base
                                                                                                                                                                                                                                                                     12-AUG-1991;
                                                                                                                                                                                                                                                                                                               01-JUL-1992;
                                                                                                                                                                                                                                                                                                                              23-DEC-1992;
                                                                                                                                                                                                                                                                                                                                         21-JUN-1994;
                                                                                                                                                                                                                                                        1991;
                                                                                                                                                                                                                                                                                                 05-MAR-1992;
                                                                                                                                                                     02-JAN-2003
                                                                                                                                                                                                                             11-JAN-1990
                                                                                                                                                                                                                                                                                                                                                                       17-AUG-1998
                                                                                                                                                                                                                                                                                    1991
                                                                                                                                                                                                                                                                                                                                                                                                                              Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                        11-JAN-
                                                                                                                                                                                                                                                                                    24-DEC-
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The invention relates to a nuclease resistant compound that hybridises with RNA or DNA, comprising covalently-bound nucleosides that individually include a ribose of deoxyribose sugar portion and a base portion. The nuclease resistant compounds are useful as therapeutics, diagnostic agents, or research reagents. The compounds are also useful for modulating the activity of an RNA or DNA molecule, or for treating an organism with a disease associated with the undesired production of a protein, e.g. bacterial, viral or protozon infections, AIDS, abnormal cell proliferation and tumour formation, or atherosclarosis. The present sequence represents the antiviral screening immunoassay oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           wew nuclease resistant compounds, useful as therapeutics, diagnostic agents, or research reagents, or for treating an organism with a disease associated with the undesized production of a protein, e.g. bacterial infections or AIDS.
         Antiviral screening; immunoassay; ss; nuclease inhibitor; gene therapy; AIDS; bacterial infection; viral infection; protozoan infection; abnormal cell proliferation; tumour formation; atherosclerosis.
                                                                                                                                                                         /note= "OTHER = 2'-0-methyl nucleotides"
                                                                                                                                                                                                                                    'note = "OTHER = 2'-0-methyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 34; Page 31; 50pp; English.
                                                                                                                                                           base= OTHER
                                                                                                                                                                                                      /*tag= b
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                    90US-00463358.
90US-00566977.
91WO-US000243.
91WO-US005720.
91US-00814961.
92US-00835932.
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92WO-US011339.
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                                                                                                                                                                                                                                                                                                                          2001US-00996263
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98US-00135202
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                                                                                                                                                                                       15. .21
                                                                                                                                               /*tag≈
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cook PD, Kawasaki AM;
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Best Local Similarity
                                                                                                                                                                                                                                                               US2003004325-A1
                                                                                                                                                                                                                                                                                                                                                                   13-AUG-1990;
11-JAN-1991;
12-AUG-1991;
24-DEC-1991;
05-MAR-1992;
                                                                                                                                                                                                                                                                                                                          28-NOV-2001;
                                                                     Unidentified
                                                                                                                               nodifed base
                                                                                                                                                                                          modifed base
                                                                                                                                                                                                                                                                                             02-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUL-1992
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21-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-JUN-1995
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                                                                                      Synthetic.
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The present invention relates to a cobalamin-bound detectable or therapeutic agent in combination with a cobalamin transport protein. In the manufacture of a medicament to increase the uptake of detectable agent useful in radioimaging or therapeutic agent for treatment of a disorder associated with abnormal cellular proliferation, an infectious disease and cardiovascular disorder; as an antibiotic or antiviral agent; for transcription of al factor. The method increases efficiency of vitamin B12 or vitamin B12 conjugated materials. The presents sequence trepresents an antisense nucleotide that can be conjugated to the carriers
                                                                                             Antisense DNA #14 that can be conjugated to the carriers of invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense DNA #1 that can be conjugated to the carriers of invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                Composition useful for the treatment of e.g. infectious disease, comprises a cobalamin-bound detectable or therapeutic agent in combination with a cobalamin transport protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
                                                                                                                            cobalamin-bound detectable; radioimaging; infectious disease; cardiovascular disorder; antibiotic; antiviral agent; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cobalamin-bound detectable; radioimaging; infectious disease; cardiovascular disorder; antibiotic; antiviral agent; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                      MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 4; SEQ ID NO 14; 97pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            described in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         130 CGGATGAAGAAGATCAAACG 149
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ADC24666 standard; DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cecaagaagaagcaaace
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                                                                                                                                                                                                                                                                        30-SEP-2002; 2002WO-US031038
                                                                                                                                                                                                                                                                                                      28-SEP-2001; 2001US-0326183P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADC24653 standard; DNA; 21
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                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 85.0 es 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-393314/37.
                                                                                                                                                                                                           WO2003026674-A1
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                                                               18-DEC-2003
                                                                                                                                                                                                                                            03-APR-2003
                                                                                                                                                                                                                                                                                                                                                                     Collins DA;
                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                 ADC24666;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
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Gaps

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Score 15.2; DB 1; Length 21; Pred. No. 6e+02; 0; Mismatches 3; Indels

CGGATGAAGAAGATCAAACG 149

130 21

17; Conservative

Matches

cechadaadaadadcaaace 2

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10017621-381.rng

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The invention relates to formulations and methods which enhance the local and systemic uptake and delivery of oligomuclectides and nucleic acids via non-parenteral routes of administration. The formulation is used for treating inflammatory bowel disease, e.g. ulcerative colitis, Crohn's disease or inflammatory bowel disease, in animals (e.g. human). It can slace be used for treating undue cellular proliferation. The present sequence is an antisense oligomuclectide targetted against Human cytomegalovirus (HCWV) gene. This sequence is used to illustrate the
                                                                                                                                                                                                                                                                                                                                                           Formulation, useful for treating inflammatory bowel disorder, e.g. ulcerative colitis or Crohn's disease, comprises oligonucleotide for rectal delivery.
                                                                                                                                                                                                                                                                                            Tillman L, Hardee GE, Ecker DJ, Manoharan M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Inflammatory bowel disorder; ulcerative colitis; Crohn's disease; cellular proliferation; phosphorothioate backbone; antisense; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note = "2'methoxyethyl nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note = "Phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 11; 45pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 CGGATGAAGAACAACG 149
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/*tag= a
/mod_base= OTHER
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                                                   21-DEC-2001; 2001US-00029598.
                                                                                    97US-00886829.
                                                                                                                        99US-00315298
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                method of the invention
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                                                                                                                                                           TENG C.
COOK P D.
TILLMAN L.
HARDEE G E.
ECKER D J.
                                                                                                                                                                                                                                                       (MANO/) MANOHARAN M
                                                                                                                                                                                                                                                                                                                              WPI; 2003-596370/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
nes 17; Conserv
                                                                                                                                                                                                                                                                                            Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
modified_base
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                                                                                                     01-JUL-1998;
20-MAY-1999;
                                                                                      01-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unidentified
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               27-FEB-2003
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                                                                                                                                                                                               (TILL/)
(HARD/)
(ECKE/)
                                                                                                                                                                                                                                                                                            Teng C,
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                                                                                                                                                               (TENG/)
                                                                                                                                                                                (COOK/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 463
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD59034/
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                                                                                                                                                                                                                                                                                                                        The present invention relates to a cobalamin-bound detectable or therapeutic agent in combination with a cobalamin transport protein. In the manufacture of a medicament to increase the uptake of detectable agent useful in radioinaging or therapeutic agent for treatment of a disorder associated with abnormal cellular proliferation, an infectious disease and cardiovascular disorder; as an antibiotic or antiviral agent; for transcription of al factor, the method increases efficiency of vitamin B12 or vitamin B12 conjugated materials. The presents sequence represents an antisense nucleotide that can be conjugated to the carriers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human cytomegalovirus (HCMV) gene specific antisense oligo, ISIS 2922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inflammatory bowel disorder; ulcerative colitis; Crohn's disease; cellular proliferation; Human cytomegalovirus; HCMV; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mod_base= OTHER
/mote= "Phosphorothioate backbone; Optionally all
cytidines are 5-metyl cytidines"
                                                                                                                                                                                                               Composition useful for the treatment of e.g. infectious disease, comprises a cobalamin-bound detectable or therapeutic agent in combination with a cobalamin transport protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'notē= "Optionally 2'methoxyethyl nucleotides"
15. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "Optionally 2'methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                     (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
                                                                                                                                                                                                                                                                                            Example 4; SEQ ID NO 1; 97pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           iocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               described in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= b
/mod_base= OTHER
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/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 cechagadadadecaadec 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      985.08;
                              30-SEP-2002; 2002WO-US031038.
                                                                   28-SEP-2001; 2001US-0326183P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAD59026 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human cytomegalovirus.
                                                                                                                                                                              WPI; 2003-393314/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003040497-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified_base
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                                                                                                                                          Collins DA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
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RESULT 462 AAD59026/c

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Gaps

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CMV; ss; antisense; virucide; anti-HIV; antiarteriosclerotic; cytostatic; 2'-fluoro substituent; AIDS; atherosclerosis; cancer; DNA-RNA hybrid.
                                                                                                                                                                                                                                           Modified oligonucleotides useful as therapeutics, diagnostics and research agents comprises several covalently bound nucleosides joined by internucleoside linkages.
                                                                                                                                                                                                                                                                                     Example 34; SEQ ID NO 18; 48pp; English
                                                                                                                    90US-00463358.
90US-00566977.
92US-00835932.
95US-00468037.
                                                                                                 2003US-00352586
                                                                                                                                                             99US-00389283
                                                                                                                                                                                  (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                     Kawasaki AM;
                                                                                                                                                                                                                         WPI; 2003-831271/77.
                                      Human herpesvirus 5.
                                                          US2003187240-A1
                                                                                                  28-JAN-2003;
                                                                                                                               13-AUG-1990;
05-MAR-1992;
                                                                                                                                                     06-JUN-1995;
                                                                                                                                                             02-SEP-1999;
                                                                                                                      11-JAN-1990;
                                                                              02-OCT-2003
                                                                                                                                                                                                     Cook PD,
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to formulations and methods which enhance the local and systemaic uptake and delivery of oligonucleotides and nucleic acids via non-parenteral routes of administration. The formulation is used for treating inflammatory bowel disorders, e.g. ulcerative colitis, Crohn's disease or inflammatory bowel disease, in animals (e.g. human). It can also be used for treating undue cellular proliferation. The present sequence is an antisense oligonucleotide used to illustrate the method of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                         Formulation, useful for treating inflammatory bowel disorder, e.g. ulcerative colitis or Crohn's disease, comprises oligonucleotide for
                                                                                                                                                                                                                                                                                                                                                 Manoharan M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                 Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                 Hardee GE,
                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 43; 45pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGCAAGAAGAGAGCAAACG 2
                                                                                                            /*tag= g
/mod_base= m5c
                                                                                                                                           /*tag= h
/mod base= m5c
mod base= m5c
                             /mod_base= m5c
                                                            /mod_base= m5c
                                                                                        /mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                 Tillman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%;
                                                                                                                                                                                                              21-DEC-2001; 2001US-00029598
                                                                                                                                                                                                                                             98US-00108673
99US-00315298
                                                                                                                                                                                                                                     97US-008B6829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                 *tag=
                                                   *tag=
                                                                                                                                                                                                                                                                                              TILLMAN L.
HARDEE G E.
ECKER D J.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-596370/56
                                                                                                                                                                                                                                                                           TENG C.
COOK P D.
                                                                                                                                                                                                                                                                                                                                                 Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                              rectal delivery.
                                                                                                                                                                         US2003040497-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention
          modified base
                                       modified base
                                                                    modified_base
                                                                                                   modified_base
                                                                                                                                modified base
                                                                                                                                                                                                                                    01-JUL-1997;
                                                                                                                                                                                                                                                       20-MAY-1999;
                                                                                                                                                                                             27-FEB-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                              (TILL/)
(HARD/)
(ECKE/)
(MANO/)
                                                                                                                                                                                                                                                                                                                                                 Teng C,
                                                                                                                                                                                                                                                                            (TENG/)
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The invention relates to a modified oligonucleotide comprising several covalently bound nucleosides including a ribose or deoxyribose sugar portion and a base portion. The nucleosides are joined together by internucleoside linkages such that the base portion of the nucleosides for internucleoside linkages such that the base portion of the nucleosides of internucleoside linkages such that the base portion of the nucleosides includes a modified ribofuranosyl moiety bearing a '-fluoro substituent. The antisense oligonucleotides of the invention are useful as therapeutics, diagnostics and research agents e.g. for the treatment of various viruses (e.g. AIDS), for modulating the production of proteins by an organism, treating an organism having a disease involving an undesired production of a protein (e.g. atherosclerosis, cancer), detecting the presence or abnormal RNA molecules, in organisms or cells, and for the expression of normal RNA molecules, or abnormal or imappropriate expression of normal RNA molecules, or abnormal or inappropriate capens: The compounds have improved stability to enzymatic degradation with various intracellular and extracellular nucleases, and improved ability to bind to a specific DNA or RNA with fidelity compared to wild-bNA bNA bNA bNA and RNA-DNA dupleases containing methylphosphonates, phosphoramidates and phosphorace triesters. The present sequence is an antisense oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antiviral screening antisense oligonucleotide ISIS #4325.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              riesters. The present sequence is a 
Invention targeting CMV replication.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cecaagaagaagcaaace 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADI12091 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-APR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 85.0
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADI12091;
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CMV antisense oligonucleotide #1.

(first entry)

15-JAN-2004

ADD44701;

2 x 2 x 5 x 8

ADD44701 standard; DNA;

RESULT 464 ADD44701, /mod_base= OTHER/ /note= "OTHER= Phosphorothioate. 1-7 and 15-21 are 2'-O-methy1"

Location/Qualifiers

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...21 *tag=

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/*tag= 15. .21 15. .21 /*tag=

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ss; nuclease resistant; mixed sequence; 2'-deoxyfuranosyl; antisense; DNA-RNA hybrid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nuclease resistant mixed sequence oligonucleotides useful as therapeutics, diagnostics, and research agents comprise at least one modified 2'-deoxyfuranosyl group.
                          Antiviral screening antisense oligonucleotide ISIS #4326.
  15-APR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                           Cook PD, Kawasaki AM;
                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-566474/53.
                                                                                                       Key
modified_base
                                                                                                                                                                                                                                                                                                                  13-AUG-1990;
05-MAR-1992;
01-JUL-1992;
                                                                                                                                                                                                                                                                                02-SEP-1999;
                                                                                                                                                                                                                                   US6531584-B1
                                                                                                                                                                                                                                                                                                                                                              05-MAR-1998;
                                                                                                                                                                                                                                                                                                        11-JAN-1990
                                                                                                                                                                                                                                                          11-MAR-2003
                                                                                                                                                                                                                                                                                                                                                   06-JUN-1995
                                                                                  Synthetic
                                                                                                                                                                           misc_RNA
                                                                                                                                                                                                  misc_RNA
   The invention relates to a nuclease resistant mixed sequence oligonucleotides comprising at least one modified 2' deoxyfuranosyl group. The modified oligonucleotides are disclosed as being useful for modulating the production of a protein by an organism, and especially for treating a disease in an organism which is characterised by the undesired production of a protein. The oligonucleotides may be used to treat diseases caused by viruses or other agents. The oligonucleotides may also be used for diagnostic methods for detecting the presence or absence of abnormal RNA molecules in an organism or cell. Oligonucleotides of the invention that selectively bind RNA may also be useful as research reagents. The new oligonucleotides are nuclease resistant and hybridise to RNA or DNA targets with high strength and specificity. The present sequence represents an antiviral screening antisense oligonucleotide.
                                                                             /*tag= b
/mod_base= OTHER
/note= "OTHER= Phosphorothioate. 1-6 and 17-21 are 2'-O-
methyl"
ss; nuclease resistant; mixed sequence; 2'-deoxyfuranosyl; antisense; DNA-RNA hybrid.
                                                                                                                                                                                                                                                                                                                                                                                                        Nuclease resistant mixed sequence oligonucleotides useful as therapeutics, diagnostics, and research agents comprise at least one modified 2'-deoxyfuranosyl group.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.2; DB 1; Length 21;
15.0%; Pred. No. 6e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 34; SEQ ID NO 18; 48pp; English.
                                                          Location/Qualifiers
1. .21
                                                                                                                                                                                                                                                                  90US-00566977.
                                                                                                                                                                                                                                  99US-00389283
                                                                                                                                                                                                                                                      90US-00463358
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                                                                                                                                                                                                                                                                                                      95US-00468037
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                                                                                                                               1. .5
/*tag= a
17. .21
/*tag= c
                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                              Kawasaki AM;
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-566474/53.
                                                           Key
modified_base
                                                                                                                                                                                     US6531584-B1
                                                                                                                                                                                                                                  02-SEP-1999;
                                                                                                                                                                                                                                                                                                                05-MAR-1998;
                                                                                                                                                                                                             11-MAR-2003
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                                                                                                                                                                                                                                                                    13-AUG-1990
05-MAR-1992
                                                                                                                                                                                                                                                                                         01-JUL-1992
06-JUN-1995
                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                            Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                    misc_RNA
                                                                                                                             misc RNA
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90US-00463358. 90US-00566977. 92US-00835932. 92US-00854634.

95US-00468037 98US-00035357

99US-00389283.

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The invention relates to a nuclease resistant mixed sequence oligonucleotides comprising at least one modified 2'-deoxyfuranosyl group. The modified oligonucleotides are disclosed as being useful for modulating the production of a protein by an organism, and especially for treating a disease in an organism which is characterised by the undesired production of a protein. The oligonucleotides may be used to treat diseases caused by viruses or other agents. The oligonucleotides may also be used for diagnostic methods for detecting the presence or absence of abnormal RNA molecules, or for detecting the inappropriate expression of normal RNA molecules in an organism or cell. Oligonucleotides of the invention that selectively bind RNA may also be useful as research reagents. The new oligonucleotides are nuclease resistant and hybridise to RNA or DNA targets with high strength and specificity. The present sequence represents an antiviral screening antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 15.2; DB 1; Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 6e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
Example 34; SEQ ID NO 19; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCAAGAAGAAGAGCAAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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ABZ75968/c
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Gaps

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130 CGGATGAAGAAGATCAAACG 149 CGCAAGAAGAAGAGCAAACG 2

21

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82.0%;

Best Local Similarity 85.0 Matches 17; Conservative

ADI12092 standard; DNA; 21 BP

ADI12092

RESULT 466
ADI12092/c
ID ADI1209
XX
AC ADI1209
XX

Hardee GE;

Geary RS,

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The present invention describes a delayed release oral formulation (A), giving enhanced gastrointestinal (GI) absorption of a drug (I). (A) enhances a first set of particles containing (I) and a penetration enhancer (II) and a second set of particles containing (II) in a delayed release coating or matrix (III). (A) is used for enhancing the absorption of (I) in mammals, especially humans. Typical disorders to be treated include ulcerative collifis, rheumancoid arthritis, Crohn's disease, inflammatory bowel disease and abnormal cellular proliferation. When the particles release (I) and (II) at a first location in the GI tract elease pulse) and is often present in insufficient amount to promote absorption of the entire dose of (I). This problem is solved by providing further (II) in delayed release form in the particles, so that absorption
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (I) is completed in a second pulse. The present sequence represents an emplary oligonuclectide from the present invention which inhibits HCMV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G protein-coupled receptor; GPCR; TGR23-2; TGR23-1; TGR23; anorectic; cytostatic; obesity disorder; cancer; appetite stimulation; PCR primer;
                                                                                                                                                                                                                                                                                                                            Pulsed release oral formulation providing enhanced gastrointestinal absorption, comprises first particles containing drug and penetration enhancer and second particles containing delayed release penetration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.2; DB 1; Length 21; 55.0%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                   /note= "phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      exemplary oligonucleotide from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human TGR23-2 PCR primer SEQ ID NO:9.
                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 28; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130 CGGATGAAGAAGATCAAACG 149
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGCAAGAGAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-SEP-2002; 2002WO-JP009446.
                                                                                                                                   22-AUG-2002; 2002WO-US026924.
                                                                                                                                                                         22-AUG-2001; 2001US-00944493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC68813 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                  Weinbach SP, Tillman LG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                        WPI; 2003-354422/33.
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                                                                                               06-MAR-2003
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                                                                                                                                                                                                                                                                                                                                                                                        enhancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC68813/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Preventing desulfurization of oligonucleotide comprising phosphorothioate linkages in bi-phasic/multi-phasic formulation, by adding to formulation an antioxidant that partitions into aqueous phase of the formulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to preventing desulphurization of an oligonuclectide or its bioequivalent comprishing one or more phosphorothioate linkages in a bi-phasic or multi-phasic formulation. method involves including in the formulation an antioxidant which partitions into the aqueous phase of the formulation. The method is useful for increasing the stability of oligonucleotide comprising phosphorothioate linkages. Sequences ABS75968-976 represent specific oligonucleotides that target genes and that may be employed in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Inhibition; phosphorothioate; delayed release oral formulation; abhanced gastrointestinal absorption; ulcerative colitis; rheumatoid arthritis; Crohn's disease; inflammatory bowel disease; abnormal cellular proliferation; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.2; DB 1; Length 21;
35.0%; Pred. No. 6e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                         ICAM-1; desulphurization; antioxidant; HCMV; antisense; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HCMV inhibitory antisense oligonucleotide SEQ ID NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                     HCMV mRNA targeting oligonucleotide ISIS 13312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            formulations of the present invention
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1. .21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 23; 51pp; English
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     BP.
                                                                                                                                                                                                                                                                                                                                                  11-JUL-2001; 2001US-00902953.
                                                                                                                                                                                                                                                                                                              11-JUL-2002; 2002WO-US022038.
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     21
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                                                                               (first entry)
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     ABZ75968 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-229426/22
                                                                                                                                                                                                                                                                                                                                                                                                                              Mehta R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
ses 17; Conserv
                                                                                                                                                                                                                                   WO2003005822-A1.
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modified base
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                                                                               29-MAY-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                               Synthetic
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                                         ABZ75968
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WPI; 2003-313356/30
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Chardes T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                               ADI30512;
                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                Matches
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                                                                                                                                                                                    invention describes polypeptides (I) and their amides, esters
                                                                                                                                                                                            and salts which bind to the human G protein. Coupled receptor (GPCR) proteins TGR23-1 and TGR23-2. TGR23 proteins have anorectic and cytostatic activities. (I) can be used in the treatment, prevention and diagnosis of obesity disorders and cancer (including cancer of the intestines, colon, breast, lung (including non-small cell lung cancer), prostate, oesophagus, stomach, liver, pancreas, kidney, womb, ovary, testis, bladder and brain, and blood cancers). (I) can also be used in appetite stimulation. Acc68807 to Acc68800 and ABP97281 to ABP97280 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G protein-coupled receptor; GPCR; TGR23-2; TGR23-1; TGR23; anorectic; cytostatic; obesity disorder; cancer; appetite stimulation; PCR primer;
                                                                                                                                  Polypeptides binding to G-protein coupled receptors TGR23-1 and TGR23-2 for prevention and treatment of obesity, cancer and appetite disorders.
                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                   Matsumoto H;
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                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                   Kitada C,
                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human GPCR TGR23-2 PCR primer SEQ ID NO:115
                                                                                   Sato S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sato S,
                                                                                                                                                                Example 2; Page 245; 338pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                               396 TGAGGTGCAGTCTCCAGTGA 415
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          14-SEP-2001; 2001JP-00279232.
12-077-2001; 2001JP-00315148.
10-APR-2002; 2002JP-00108621.
10-JUN-2002; 2002JP-00169232.
                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC68881 standard; DNA; 21 BP
                                                                                 Miya H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-SEP-2002; 2002WO-JP009446.
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12-OCT-2001; 2001JP-00315148.
10-APR-2002; 2002JP-00108621.
10-JUN-2002; 2002JP-00169232.
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                                                             (TAKE ) TAKEDA CHEM IND LID
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                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 85.0°
Matches 17; Conservative
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                                                                                 Hayashi K, R
Shimomura Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hayashi K, 1
Shimomura Y;
                                                                                                               WPI; 2003-313356/30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                Mori M,
Nagi I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mori M,
Nagi T,
                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 470
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Polypeptides binding to G-protein coupled receptors TGR23-1 and TGR23-2 for prevention and treatment of obesity, cancer and appetite disorders.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               anti-CD4; 13B8; 2; Fab fragment; CD4; immunosuppressive; antirheumatic; antiarthritic; antipsoriatic; dermatological; antinflammatory; cytostatic; virucide; anti-HIV; autoimmune disease; rheumatoid polyarthrits; psoriasis; lupus erythromatosus; immunological intolerance reaction; transplantation; graft versus host disease; cancer; immunodeficiency; HIV; PCR; primer;
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Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 39; 78pp; French.
                                                                                                                     Example 39; Page 327; 338pp; Japanese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     396 TGAGGTGCAGTCTCCAGTGA 415
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%;
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nes 17; Conservative
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The present invention relates to a method for deprotection of phosphorus-protected oligonucleotides. The method involves contacting the phosphorus reprotected oligonucleotide with non-malodorous deprotecting agent to remove the phosphorous protecting group (which is optionally substituted alkyl). The method is useful for the preparation of phosphorus protected oligonucleotides, which is useful for the preparation of phosphorus protected compound. The present sequence is an oligonucleotide, used to illustrate the method of the invention.
           has immunosuppressive, antirhematic, antiatthritic, antipsoriatic, dermatological, antiinflammatory, cytostatic, virucide, and anti-HIV activity. A mutant fragment of the invention is useful for treating and preventing autoimmune diseases, specifically rheumatoid polyarthritis, psoriasis or lupus erythromatosus; immunological intolerance reaction, especially where induced by transplantation or graft versus host disease; cancers in which CD4 is implicated (especially CD4+ or Cesari lymphoma); and immunodeficiency states associated with viral infection, especially HIV. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        preparation of pharmaceutical compound involves contacting the phosphorus protected oligonucleotide with non-malodorous deprotecting agent.
domain (Vkappa) of the light chain. A protein of the invention
                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                     0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide #3, used in phosphorus deprotection method.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                    G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Deprotection; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                 1628 GCCCCAGCAGCCAGCGCTG 1647
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                                                                                                                                                                                                                                                                                                                                                                   GCCCCAGTAAGCAGCGCCTG 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-JUL-2003; 2003WO-US022211.
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                                                                                                                                                                                                                        Sequence 21 BP; 3 A; 6 C; 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                17; Conservative
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                                                                                                                                                                                                                                                                               Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             preparation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                          invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADI29043;
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                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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This invention relates to novel compositions that comprise short

interfering RNA (siRNA) molecules, which can be used to inhibit

cangiogenseis. Specifically, it refers to siRNAs that target and cause
RNAi-induced degradation of mRNA item human vascular endothelial growth

factor (VBGF), the VBGF receptor (Flt-1) and the Flk-1/KDR (kinase domain

cergion) genes, as well sa mutants derived thereof. The present invention

describes sense and antisense RNA strands that form an RNA duplex and

child to the target mRNA, such that expression is inhibited and the target

ce degraded. As such, siRNA administered in combination with a therapeutic

ce agent is useful for treating diseases associated with anglogenesis and

the overexpression of VEGF, which include diabetic retinopathy, age-

ce theumatoid arthritis. Furthermore, it can be used to treat various

crancers including breast, retinoblastoma, Wilm's tumour and lymphoma.

CC Accordingly, these compositions exhibit cytostatic, antidiabetic

cophthalmological, antiinflammatory, antipsoriatic, antidiabetic

antiathritic activities. This oligonucleotide is a human Flk-1/KDR DNA

collgo, a target for siRNA inhibition of the invention.
                                                                                                                                                                                                                                                            human; ss; short interfering RNA; siRNA; angiogenesis; vascular endothelial growth factor; VEGF, VEGF receptor; Flt-1; Flk-1/KDR; kinase domain region; diabetic retinopathy; age-related macular degeneration; inflammatory disease; psoriasis; rheumatoid arthritis; cancer; breast; retinoblastoma; wilm's tumour; lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory; antipsoriatic; antirheumatic; antiarthritic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel short interfering RNA (siRNA) comprises sense and antisense RNA strands, useful for inhibiting expression of human vascular endothelial growth factor mRNA, for treating angiogenic disease, e.g. diabetic
                                                                                                                                                                                                                            Human Flk-1/KDR DNA sequence, a target for siRNA inhibition SeqID 577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 10 A; 7 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. 6e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 577; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.9%; Score 15.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            974 ACCGAGACCTCAAGCCCCAG 993
                21 cechachachachachace
                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JUL-2003; 2003WO-US022444.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-JUL-2002; 2002US-0398417P.
14-NOV-2002; 2002US-00294228.
82.0%;
                                                                                                                  ADJ97804 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYPE-) UNIV PENNSYLVANIA.
                                                                                                                                                                                              entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   retinopathy and cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Reich
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-203472/19.
                                                                                                                                                                                              (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
es 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2004009769-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Folentino MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                              06-MAY-2004
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                                                                                                                                                        ADJ97804;
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                                                                              RESULT 473
                                                                                              ADJ97804
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Gaps

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0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels

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17; Conservative

Matches

Query Match Best Local Similarity

10017621-381.rng

ADK69873/

RESULT

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The invention relates to phosphorothioate oligonucleotides having nucleoside with 240 modification are prepared by phosphitylating 5'-hydroxyl of a nucleic acid moiety having a nucleoside with 2' modification in an acetonitrile containing solvent mixture to form a phosphite intermediate; and oxidising the phosphite intermediate with an acetyl disnlifide in an acetonitrile for a time to effect conversion of the phosphite intermediate to phosphorothioate. The invented method achieves high yields and greater efficiency. The present sequence is sulphurised oligonucleotide used in the exemplification of the invention.
                                                                             Phosphorothioate backbone; sulphurised oligonucleotide; RNA-DNA hybrid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Preparation of phosphorothioate oligonucleotides involves oxidizing phosphite intermediate with acetyl disulfide in acetonitrile for time effect conversion of phosphite intermediate to phosphorothioate.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                  note = "Phosphorothioate backbone"
                                                                                                                                                                                                                                                                        1. .7
/*tag= a
/label= RWA
/note= "2'-methoxyethyl residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
                                     Sulphurised oligonucleotide #7 (RNA-DNA hybrid)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cheruvallath ZS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 9; SEQ ID NO 7; 8pp; English
                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                             mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 CGCAAGAAGAGAGCAAACG 2
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10-JAN-2001; 2001WO-US000715.
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/label= RNA
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 06-MAY-2004 (first entry)
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Best Local Similarity 85.09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (COLE/) COLE D L.
(RAVI/) RAVIKUMAR V T.
(CHER/) CHERUVALLATH Z S.
                                                                                                                                                                                                                                                                                                                                       5. .21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cole DL, Ravikumar VT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADJ79632 standard; DNA;
                                                                                                                                                                                                             *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-069376/07
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                                                                                                                                                                                       modified base
                                                                                                                                  Unidentified
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                                                                                                                                                                                                                                                                  misc_RNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to phosphorothioate oligonucleotides having nucleoside with 240 modification are prepared by phosphitylating 5'-hydroxyl of a nucleic acid moiety having a nucleoside with 2' modification in an acetonitrile containing solvent mixture to form a phosphite intermediate; and oxidising the phosphite intermediate with an acetyl disulfide in an acetonitrile for a time to effect conversion of the phosphite intermediate to phosphorothioate. The invented method achieves high yields and greater efficiency. The present sequence is sulphurised oligonucleotide used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Preparation of phosphorothioate oligonucleotides involves oxidizing phosphite intermediate with acetyl disulfide in acetonitrile for time to effect conversion of phosphite intermediate to phosphorothioate.
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                                                                                                                                                                                                                                               Phosphorothioate backbone; sulphurised oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                               /mod_base= OTHER
/note= "Phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cole DL, Ravikumar VT, Cheruvallath ZS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 5; SEQ ID NO 3; 8pp; English.
                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
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                                                                                                                                                                                                         Sulphurised oligonucleotide #3
ACCGAGACCTAAAAACCCAG
                                                                                          ADK69873 standard; DNA; 21 BP
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10-JAN-2001; 2001WO-US000715.
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                                                                                                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (COLE/) COLE D L.
(RAVI/) RAVIKUMAR V T.
(CHER/) CHERUVALLATH Z S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                         . .21
*tag=
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Matches 17; Conserv
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modified_base
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                                                                                                                                                                   06-MAY-2004
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                                                                                                                                ADK69873;
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RESULT 475

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ADK69877,

SAXB

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The invention relates to a method for treatment of infection by alphaherpesviridae, beta-herpesviridae or gamma-herpesviridae involving administration of an arylnaphthalene compound. The method is used for treating infection by beta-herpesviridae (preferably herpesvirus 5, 6 o 7), gamma-herpesviridae (preferably herpesvirus 4 or 8) and alphaherpesviridae (preferably herpesvirus 1, 2 or 3). The arylnaphthalene compound inhibits virus growth. This sequence represents a phosphorothioate oligonucleotide used to treat herpesviridae infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Use of arylnaphthalene compound for treating infection by herpesvirus e.g. alpha herpesvirinae, beta herpesvirinae and gamma herpesvirinae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human heat shock protein 27 antisense oligonucleotide SEQ ID NO:2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       heat shock protein 27; hsp27; cytostatic; gene therapy; heat shock protein 27 inhibitor; hsp27 inhibitor; cancer; human; antisense oligonucleotide; ss.
                                                                                Alpha-herpesviridae, beta-herpesviridae, gamma-herpesviridae, arylnaphthalene, herpesvirus, virus growth inhibition, phosphorothioate oligonucleotide, virucide, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chang S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure, Page 3; 10pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           130 CGGATGAAGAAGATCAAACG 149
                         Phosphorothicate oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                 23-MAY-2003; 2003US-00445268
                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAY-2002; 2002US-0382692P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hsieh H, Juan L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-256788/24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HSU T.
HSIEH H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JUAN L.
CHANG S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004030660-A2.
                                                                                                                                                                                                                                                                          US2004044069-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KUO Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                             Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-2004
                                                                                                                                                                                                                                                                                                                                 04-MAR-2004.
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(HSIE/) H
(JUAN/) C
(CHAN/) (
(KUOY/) 1
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ADM94652
ID ADM8
XX
AC ADM8
XX
DT XX
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                                                                                                                                                                                                                                                                        The present invention describes a composition which comprises a therapeutic agent that reduces the amount of active heat shock protein 27 (hsp27) in hsp27 expressing cells exposed to the therapeutic agent. The composition has cytostatic activity, and can be used in gene therapy. The composition is useful in treating cancer, e.g., prostate, bladder, lung, breast, pancreatic, colon, skin (for example melanoma), renal or ovarian cancer or a central nervous system malignancy. The present sequence represents a human hsp27 antisense oligonucleotide which is used in the exemplification of the present invention.
                                                                                                                                                                New composition comprising a therapeutic agent that reduces the amount of active hsp27 in hsp27 expressing cells exposed to the therapeutic agent, useful in treating cancer, e.g., prostate cancer or a central nervous system malignancy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Formulation useful for treating, controlling or preventing prion disease or for prophylactic treatment of cancer caused by oncoviruses, comprises an antiviral oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene therapy; antiviral oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 2 A; 6 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             prion disease; cancer; oncovirus; ss.
                                                                                                        Signaevsky M;
                                                                                                                                                                                                                                             Claim 5; SEQ ID NO 2; 38pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020 GCTCAAGCTGGCTGACTTTG 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGTCATGCTGGCTGACTCTG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                         (UYBR-) UNIV BRITISH COLUMBIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-SEP-2002; 2002US-0410264P. 05-DEC-2002; 2002US-0430934P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-SEP-2003; 2003WO-IB004573
02-OCT-2003; 2003WO-CA00158B
                            02-OCT-2002; 2002US-0415859P
18-APR-2003; 2003US-0463952P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21mer antisense against CMV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADO20547 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 85.0 es 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Juteau J;
                                                                                                        Rocchi P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (REPL-) REPLICOR INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-270045/25.
                                                                                                                                     WPI; 2004-316331/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2004024919-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytomegalovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vaillant A,
                                                                                                         Gleave ME,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Virucide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AD020547;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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or

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The invention relates to an antiviral oligonucleotide formulation

comprising an antiviral oligonucleotide, where the antiviral activity of

the oligonucleotide occurs principally by a non-sequence complementary

mode of action. Further disclosed is a kit comprising at least one

antiviral oligonucleotide or antiviral oligonucleotide formulation in a

labelled package, where the label on the package indicates that the

antiviral oligonucleotide can be used against at least one virus, and a

method for the prophylactic treatment of cancer caused by oncoviruses in

tuman or non-human animal. The formulations and antiviral pharmaceutical

composition are useful in the treatment, control, or prevention of a

composition are useful in the treatment of cancer caused by oncoviruses in

useful for the prophylactic treatment of cancer caused by oncoviruses in

a human or a non-human animal, or viral infections. The current sequence

represents an oligonucleotide used in an example from the invention.
                       Example 1; Page 103; 161pp; English.
\overset{\mathcal{H}}{\times}\overset{\times}{\times}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\circ}\overset{\circ}{\ci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Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; Live 0; Mismatches 3; Indels 130 CGGATGAAGAAGATCAAACG 149 21 CGCAAGAAGAAGAGCAAACG 2 17; Conservative Query Match Best Local Similarity Best Loc à q

.; 0

Gaps ;

> RESULT 479 ADQ58895/

Yin yang-1 (YY-1) associated primer #3. ADQ58895 standard; DNA; 21 BP (first entry) 23-SEP-2004 ADQ58895;

antidiabetic; immunosuppressive; cytostatic; Yin Yang-1; transcription factor; type I diabetes; transgenic; diabetes; multifunctional transcription factor; type 2 diabetes; autodimmune disease; cancer; mineral metabolism disorder; lipid metabolism disorder; rat; YY-1; PCR; primer; ss.

Rattus norvegicus.

WO2004056857-A2.

38-JUL-2004.

19-DEC-2003; 2003WO-EP014762.

20-DEC-2002; 2002DE-01061650.

(UYGR) UNIV GREIFSWALD.

Kloeting N; Kloeting I,

WPI; 2004-507695/48.

New variant of the Yin Yang-1 transcription factor, useful for treating e.g. diabetes and autoimmune disease, also for diagnosing predisposition and in screening for therapeutic agents.

Disclosure; Fig 11; 193pp; German.

The invention describes a protein variant of the Yin Yang-1 transcription factor (I), having a 411 amino acid (aa) sequence (4) reproduced. Also described are: protein (Ia) that is a homologue of (4) and includes Arg a position 303 and Lys at position 31; peptide (II) that is a fragment of (I) or (Ia) and includes the positions 303 and 311 of (4); nucleic acid (II) that encodes (I), (Ia) or (II); an antibody (Ab) directed against (I) or (Ia); methods for determining a tendency to develop type 1

diabetes, transgenic non-human mammal (A) in which the germ and somatic cells contain a nucleic acid (or segment) encoding a 411 as sequence (2), or sequences with at least 95, best 93* homology, where the homologue includes 303Met and 311Mrg; and use of (A) to screen for compounds that are protective against diabetes. The methods are useful for modulating activity of the Y1 (Yin Yang-1) multifunctional transcription factor. (I), or its homologues and peptides, also nucleic acids encoding them and antisense oligonucleotides, are useful for treatment of type 1 lipid metabolism. Detecting mutations in the human analogue of (4) is used to determine a predisposition for these diseases. Transgenic animals that contain the sequence encoding (4), or its homologues, are used to escreen for against diabetes. This sequence represents a primar associated with the isolation and analysis of yin yang-1 transcription factor.

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Sequence 21 BP; 0 A; 11 C; 1 G; 9 T; 0 U; 0 Other;

Gaps 0; Score 15.2; DB 1; Length 21; Pred. No. 6e+02; 0; Mismatches 3; Indels 3; Indels 0.9%; Scor. 85.0%; Pred 17; Conservative Best Local Similarity Query Match Matches

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43 20 AGGAAGGCAGAGGAAG 1 24 AGGAATGCAGAGGTAGGCAG à g

AAQ43226 RESULT

AAQ43226 standard; DNA; 22

AAQ43226;

(first entry) (revised) 25-MAR-2003 13-OCT-1993

B-B10 V region primer VHback #1.

Complementarity-determining region; CDR; humanised; antibody; hIL2R; human; interleukin; IL-2; receptor; murine; anti-human; Ab; T-cell; monoclonal antibody; B-B10; mixed lymphocyte reaction; variable; V; region; PCR; framework; plasmid; heavy; H; light; L; amplify; primer; polymerase chain reaction; ss.

Synthetic.

WO9311238-A1

10-JUN-1993.

91JP-00323319. 92WO-JP001583 03-DEC-1992; 06-DEC-1991; (SUMU) SUMITOMO PHARM CO LID. BIOTEST PHARMA GMBH. (BIOT

(INNO-) INNOTHERAPIE LAB.

Noguchi H; Wijdenes J, Nakatani T, Gomi H,

WPI; 1993-197057/24.

for IL-2 receptor useful for treating carcinoma expressing IL-2 receptor Humanised antibody comprising - CDR region of mouse MAB B-B10 specific

Disclosure; Page 44; 62pp; English.

The sequences given in AAQ43226-32 are primers which were used in the cloning of DNA encoding the variable (V) regions of the murine anti-human IL-2 receptor monoclonal Ab (MAb) B-B10. This MAb was used in the construction of a humanised antibody (Ab) which binds specifically to human interleukin (IL)-2 receptor (AIL2R). The complementarity-determining regions (CDRs) for the hIL2R MAb were derived from B-B10 (see

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /noce= "2'-0-[hexyl-N-(3-oxycarbonyl-cholesteryl)amino]-
uridine or may be 5'-0-dimethoxyrrityl-2'-0- [hexyl-N-(5-
thiocarbonyl-3,6-dipivolyl fluorescein)amino]uridine"
also AAR37599-04). The hIL2R MAb is antagonistic to the binding of IL-2 to the IL-2 receptor on human T-cells. It also inhibits the human mixed lymphocyte reaction. The cDNA encoding the variable (V) region of the B-B10 Ab was cloned by PCR and sequenced (see also AQ431233-36) A human Ab with high levels of amino acid sequence homology to the murine sequence was selected and the framework of this Ab was bound with the B-B10 V region CDR and a part of the framework to design several kinds of the humanised B-B10 V region. The DNA sequence coding this humanised B-B10 was synthesised and a plasmid expressing humanised B-B10 was constructed. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New amine-derivatised nucleoside(s) and oligo:nucleoside(s) - useful as diagnostics, therapeutics and research reagents, partic. in anti-sense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alkylamino group; ribofuranosyl sugar; antisense therapy; virus; HIV;
herpes; papilloma; antiviral; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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//tag= b
/note="contains phosphorothioate linkages between
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                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.2; DB 1; Length 22; 85.0%; Pred. No. 6.3e+02;
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                                                                                                                                                                                                                                                                                                                                               Sequence 22 BP; 7 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Anti-CMV 2'-0-alkylamino-containing oligomer #70.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGTCAAACTGCAGCAGTCA 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ85817 standard; DNA; 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17; Conservative
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/mod_ba
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
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07-NOV-1995
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AAQ85817/C
ID AAQ85
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cytomegalovirus (CMV) sequence. The modified nucleosides may increase the half-life of the oligomers in cell extract assays for the inhibition of specific target sequences. The modified oligomer is an example of a compound (see AAQST99-Q85839 for other examples) e.g. a nucleoside or oligonucleoside, which contains a ribofuranosyl sugar portion and a base portion, such that at least one of the nucleoside contains at a 2'-0', 3' o' o s'-0-position, a substitution (see AAQSS799 for details of the substitutions). The compounds are useful in diagnostics, therapeutics and as research reagents particularly in antisense therapy for killing calls and viruses such as HIV, herpes or papilloma viruses. (Updated on 25-MAR-2003 to correct PN field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This oligonuclectide was used to generate a fusion protein in which the sea firefly (Vargula sp.) luciferase is linked to an epidermal growth factor receptor, via a mouse immunoglobulin (1g) constant heavy domain 4 (CH4) chain. This oligonuclectide was used to construct the CH4 linker. This is an example of a method of detectably labelling cells by fusing a secretory-type luminescent enzyme with a cell membrane protein and expressing the fusion protein on the cell membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sea firefly, Vargula; luciferase; label; mouse; immunoglobulin; murine; constant heavy domain; epidermal growth factor receptor; fusion protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A method of labelling cells - comprising a luminescent protein fused to
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                                                                                                                                                                                                                                                                   Query Match

0.9%; Score 15.2; DB 1; Length 22;
Best Local Similarity 85.0%; Pred. No. 6.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                  Sequence 22 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 1 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide for murine Ig CH4 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1726 GITCACCIGCCCACTIGICC 1745
                                                                                                                                                                                                                                                                                                                                                   130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 3; Page 3; 9pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                       CGCAAGAAGAAGAGCAAACG 3
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Matches 17; Conservative
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22 ATCTTCAGAGAGGATGCCAT

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GTTTACCTGTCGACTTGTCC 1

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Nucleic acids encoding polypeptides, designated NOVX polypeptides, useful for treating a syndrome associated with a NOVX-associated disorder, e.g. ceil proliferation (e.g. cancer and diabetic retinopathy), angiogenic or
                                                                                                                                                                         Human; NOV2; ss; fertility disorder; spermatogenesis; cardiant; cytostatic; immunomodulatory; antiproliferative; antidiabetic; cell proliferation; cancer; diabetic retinopathy; angiogenic disorder; pulmonary disorder; hematopoietic disorder; immunological disorder; inflammatory disorder; tumour related disorders; emphysema; cirrhosis; wound healing; gene therapy; RTQ PCR primer; Real-time quantitative PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to nucleic acids encoding NOVX (X being an integer from 1-8) polypeptides. The NOVX nucleic acids and polypeptides are useful in diagnosting, treating or manufacturing a medicament for a disease or disorder associated with NOVX e.g. cell proliferation (cancer and diabetic retinopathy), angiogenic or pulmonary disorders, fertility inflammatory and tumour related disorders, emphysema, cirrhosis, wound healing. NOVX nucleic acids are also useful in gene therapy. They are also used for screening for a modulator of activity or of latency or predisposition to a NOVX-associated disorder. They are also useful for determining the presence of or predisposition to a NOVX-associated disorder. They associated disorder. They associated disorder. They associated disorder. They are also useful for disorder. The presence of or predisposition to a NOVX-associated disorder. They associated disorder. They are also useful for disorder. The presence is an RTO PCR primer (real-time quantitative PCR) for amplifying nucleic acids encoding human NOV2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 120; 144pp; English.
                                                                                                                                      Human NOV2 RTQ PCR forward primer.
                    ВР
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2000US-0175488P.
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04-JAN-2001; 2001US-00755665
                AAS10876 standard; DNA; 22
                                                                                               (first entry)
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13-JAN-2000;
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                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                         AAS10876;
AAS10876/
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Spytek KA;

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Human; G-protein coupled receptor; GPCR; cardiomyopathy; atherosclerosis; diabetes; cell signal processing; metabolic pathway modulation; cancer; adenocarcionma; Jryphoma; prostate cancer; uterus cancer; asthma; immune response; neurodegenerative disorder; inflammatory disorder; crohn's disease; multiple sclerosis; Albright hereditary osteodystrophy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to novel isolated G-protein coupled receptor (GPCR) polypeptides and polynucleotides. The GPCR polypeptide, GPCR nucleic acid and antibody are useful for treating, preventing or alleviating a GPCR-associated disorder or a pathological state in a subject, particularly a human. In particular, the disorder is cardiomyopathy, atherosclerosis, diabetes, or a disorder related to cell signal processing and metabolic pathway modulation. The GPCR polypeptide and nucleic acid are also useful for diagnosing the presence of or predisposition to a disease associated with altered levels of GPCR, particularly cancer. The GPCR nucleic acid amplications for disorders associated with aberrant GPCR expression or activity. The DNA encoding the protein is useful in gene therapy for treating the above conditions. Furthermore, the nucleic acids and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Edinger S;
Gunther E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New G protein coupled receptor polypeptides and polynucleotides, useful in gene therapy, particularly for treating or preventing cardiomyopathy, atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer
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Macdougall JR,
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                                                                                                                             Human G-protein coupled receptor, reverse primer #73.
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Shenoy SG, Gusev V, I
Stone DJ, Sciore P, I
Gangolli EA, Millet I
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Padigaru M,
                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-0257876P.
2001US-0259743P.
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2001US-0275946P.
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2001US-0267464P
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                              ABS59071 standard; DNA; 22
                                                                                              (first entry)
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Ellerman K,
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                                                                                                                                                                                                                                          primer; PCR; ss.
                                                                                                                                                                                                                                                                                                         WO200259313-A2.
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                                                                                                                                                                                                                                                                            Homo sapiens.
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19-JUN-2001;
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04-JAN-2001;
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                                                              ABS59071;
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               ABS5907
RESULT
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17; Conservative

Matches

Local Similarity

Query Match

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Gaps

0;

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polypeptides are useful in treating adenocarcinoma, lymphoma, prostate cancer, uterus cancer, immune response, neurodegenerative disorders, asthma, inflammatory disorders, Crohn's disease, multiple sclerosis or Albright hereditary osteodystrophy. These are also useful in developing a powerful assay system for functional analysis of various human disorders, as well as in diagnostic applications. ABS58747-ABS59231 represent human GPCR coding sequences, primers and probes of the invention
                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                   0.9%; Score 15.2; DB 1; Length 22;
85.0%; Pred. No. 6.38+02;
live 0; Mismatches 3; Indels
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les 17; Conservative
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Human, anti-HIV; cytostatic; antidiabetic; antiasthmatic; cachexia; AIDS; antiinflammatory; cardiant; haemostatic; neuroprotective; anorectic; notropic; immunosuppressive; osteopathic; antiparkinsonian; cancer; antiinfertility; cerebroprotective; gene therapy; NOVX; NOV; fertility; metabolic disorder; diabetes; obesity; infectious disease; anorexia; neurodegenerative disease; Alzheimer's disease; Parkinson's disease; immune disorder; haematopoietic disorder; cardiovascular disorder; bronchial asthma; dyslipidemia; metabolic disturbance; neurogenesis; pCR; metabolic syndrome X; wasting disorder; cell differentiation; primer; cell proliferation; haematopoiesis; wound healing; angiogenesis; ss. Human NOV31 reverse PCR primer Ag3530

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ABV99538 standard; DNA; 22

RESULT 485 ABV99538/c

(first entry)

27-JAN-2003

ABV99538;

Homo sapiens

WO200272771-A2

19-SEP-2002.

08-MAR-2002; 2002WO-US007288

08-MAR-2001, 2001US-0274194P.
08-MAR-2001, 2001US-0274194P.
08-MAR-2001, 2001US-0274321P.
09-MAR-2001, 2001US-0274322P.
12-MAR-2001, 2001US-0275238P.
13-MAR-2001, 2001US-0275578P.
13-MAR-2001, 2001US-0275601P.
14-MAR-2001, 2001US-027670P.
16-MAR-2001, 2001US-027670P.
19-MAR-2001, 2001US-0276778P.
20-MAR-2001, 2001US-0277331P.
20-MAR-2001, 2001US-0277331P.
20-MAR-2001, 2001US-0277331P.
21-MAR-2001, 2001US-0277331P.

2001US-0279036P. 2001US-0279344P. 2001US-0279995P. 2001US-0280233P. 22-MAR-2001; 2001US-0277833P. 23-MAR-2001; 2001US-02781S2P. 26-MAR-2001; 2001US-0278894P. 27-MAR-2001; 2001US-02788999P.

28-MAR-2001; 30-MAR-2001; 30-MAR-2001;

2001US-0294485P 2001US-0294883P 2001US-0294883P 2001US-0299027P 2001US-0299303P 2001US-0299303P 2001US-030918462P 2001US-0318462P 2001US-0318462P 2001US-0318462P 2001US-0318462P 2001US-0318462P 2001US-0318770P 2001US-0325681P 2001US-0335301P 2001US-0335301P 2001US-0280822P. 2001US-0280900P. 2001US-028149P. 2001US-0287424P. 2001US-028966F. 2001US-028965P. 2001US-0289528P. 2001US-029199P. 2001US-0291099P. 2001US-0332272P. 2001US-0333184P. 2001US-0333272P. 2001US-0332094P. 2002US-0345705P 2002US-00093463 03-MAY-2001; 03-MAY-2001; 15-MAY-2001; 30-MAY-2001; 31-MAY-2001; 19-JUN-2001; 19-JUN-2001; 16-AUG-2001; 10-SEP-2001; 12-SEP-2001; 14-NOV-2001; L8-JUN-2001; 27-SEP-2001; 27-SEP-2001; 18-OCT-2001; 31-OCT-2001; 14-NOV-2001; 21-NOV-2001; 14-NOV-2001;

(CURA-) CURAGEN CORP.

CAM; PF: Rastelli L, Mezes PD, Smithson G, Guo X, Gerlach V, Casman SJ; Boldog FL, Li L, Zerhusen BD, Tchernev VT, Gangolli EA, Vernet Pena CEA, Burgess CE, Liu X, Spytek KA, Gorman L, Spaderna SK; Voss EZ, Malyankar UM, Anderson DW, Patturajan M, Miller CE; Taupier RJ, Padigaru M, Shenoy SG, Kekuda R, Gusev VY, Pochart Zhong M;

WPI; 2002-732824/79.

New NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders e.g. diabetes, cancer, Alzheimer's disease, dyslipidemias, obesity, immune or hematopoietic disorders, and asthma.

Example C; Page 505; 619pp; English.

The present invention relates to new isolated proteins (NOVX) and their coding sequences (ABV99127-ABV99595 and ABP70049-ABP70149), where X is any number from 1 to 48. The NOVX proteins and coding sequences are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The NOVX coding sequences and proteins are useful for treating, preventing or diagnosing diseases, uncreasing an estabolic disorders, concer, neurodegenerative diseases, Alzheimer's disease, Parkinson's disease, immune disorders, haematopoietic disorders, cardiovascular disorders, fertility, bronchial asthma, AIDS, dyslipidemia, metabolic disturbances associated with obesity, metabolic syndrome X or wasting disorders associated with chronic diseases or various cancers. The NOVX coding sequences and proteins may also be used as targets for the identification of small molecules that modulate or inhibit e.g.

22

(first entry)

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ADF70306 standard; DNA;
                                                                                                                                      12-FEB-2004
                                                                                                           ADF70306;
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 wound healing and angiogenesis, in gene therapy, in generation of antibodies that bind immunospecifically to NOVX substances for use in therapeutic or diagnostic methods. The present sequence is a PCR primer, which was used in an example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Production of C-terminal modified proteins with nucleotide-linker containing modifying agents and translation templates, useful for detecting protein interaction in functional analysis of genes e.g. in
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                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                          PCR primer containing part of c-jun and 6 repeated His-tags.
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                                                                                          ch 0.9%; Score 15.2; DB 1; Length 22; 1 Similarity 85.0%; Pred. No. 6.3e+02; 17; Conservative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 22 BP; 0 A; 1 C; 13 G; 8 T; 0 U; 0 Other;
                                                                 Sequence 22 BP; 2 A; 6 C; 5 G; 9 T; 0 U; 0 Other;
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                                                                                                                                                1531 CTACAAAAGGAGGCCAGCCT 1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 5; Page 88; 95pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Miyamoto E,
                                                                                                                                                               CTACAAACGAGGACAGACT 3
                                                                                                                                                                                                                                             85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-DEC-2001; 2001WO-JP010731.
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Best Local Similarity 85.0%;
Matches 17; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-DEC-2000; 2000JP-00373105
                                                                                                                                                                                                                                             ABK95214 standard; DNA; 22
                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     examples of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Doi N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-500446/53
                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYKE-) UNIV KEIO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      genome projects.
                                                                                                                                                                                                                                                                                                                                                                                                                     WO200246395-A1.
                                                                                                                                                                                                                                                                                                24-SEP-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yanagawa H,
                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                      ABK95214;
                                                                                            Query Match
                                                                                                        Best Loca
Matches
                                                                                                                                                                                                                   RESULT 486
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Modulating the expression of a nucleic acid in the hepatic system, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for treating hepatic disorders, comprises administering to the mammal an oligonucleotide that hybridizes to the nucleic acid to modulate its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention relates to a novel method of modulating the expression of a nucleic acid in the hepatic system of a mammal which comprises administering to the mammal an oligonucleotide that hybridises to the nucleic acid to modulate the expression of the nucleic acid, where the oligonucleotide has two sterol groups that are covalently bonded. The invention may be useful for the development of a compound with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hepatotropic activity whilst the genetic sequences of the invention may prove useful for gene therapy. The methods are useful for treating hepatic disease or disorder associated with a protein encoded by a gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                              expression modulation, hepatic system; sterol group; hepatotropic, gene therapy; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           phosphorothicate backbone or having ribonucleoside bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Coriolus hirsutus cellulose hydrolytic gene primer #13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 22 BP; 0 A; 6 C; 5 G; 10 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 7; SEQ ID NO 19; 98pp; English.
CMV antisense oligonucleotide SegID19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bennett FC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22 CGCAAGAAGAAGAGCAAACG
                                                                                                                                                                                                                                                                                                                                                                   21-FEB-2003; 2003WO-US005066.
                                                                                                                                                                                                                                                                                                                                                                                                                                 22-FEB-2002; 2002US-00080979
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-679947/64.
                                                                                                                                                                  Cytomegalovirus.
                                                                                                                                                                                                                                   WO2003072711-A2.
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ID ADF77
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AC ADF77
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DT 26-FI
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DE Coric
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Gaps

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3; Indels

0; Mismatches

fibroblast growth factor-21; FGF-21; alpha-2 macroglobulin-like polypeptide variant; antileukoproteinase 1 precursor; LIV-1; nuclear hormone receptor NOR-1; transmembrane protein-like; beta-neoendorphin-dynorphin precursor.

surface antigen Ly-9 precursor;

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enzyme gene and a gene encoding the ligninase so ligated that the gene can transcribe; preparing a host cell with the vector; and culturing such host cells. The promoter sequence of the cellulose-decomposing enzyme gene is particularly the promoter sequence of the callobiose endoyloranase I gene or beta-glucosidase gene. The DNA fragment for the ringhinase in basidiomycetous host is applicable in production of recombinant ligninase in host-vector system for use in processing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a method for producing a ligninase comprising the construction of a vector from a recombinant DNA containing a DNA with a promoter sequence of a Basidiomycetes-derived cellulose-decomposing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     woodchips and pulp. This sequence corresponds to a primer to PCR amplify the genes and promoter fragments of the invention.
         ss; primer; ligninase; Basidiomycetes; cellulose-decomposing enzyme; promoter; cellobiose dehydrogenase; cellobiohydrolase I; cellobiohydrolase II; endoglucanase I; beta-glucosidase; woodchip; pulp.
                                                                                                                                                                                                                                                                                                                                                                                           DNA fragment having promoter activity for highly producing ligninase in basidiomycetous host, applicable in production of recombinant ligninase in host-vector system for use in processing woodchips and pulp.
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85.0%; Pred. No. 6.3e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 22 BP; 2 A; 6 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; SEQ ID NO 18; 133pp; Japanese
                                                                                                                                                                                                                                                                                                                                  Kabuto M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  108 GCCCCCGCCGATCGCCATGG 127
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                                                                                                                                                                       25-FEB-2003; 2003WO-JP002057.
                                                                                                                                                                                                                     2002JP-00206762.
2002JP-00251720.
                                                                                                                                                                                                        2002JP-00048674.
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                                                                                                                                                                                                                                                     29-AUG-2002; 2002JP-00251923.
29-AUG-2002; 2002JP-00252055
                                                                                                                                                                                                                                                                                                                                  Isukamoto A, Nakagame S,
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                                                                                                                                                                                                                                                                                                   (OJIP ) OJI PAPER CO
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                                                                            Trametes hirsuta
                                                                                                           WC2003070939-A1
                                                                                                                                                                                                        25-FEB-2002;
                                                                                                                                                                                                                                       29-AUG-2002;
                                                                                                                                                                                                                       16-JUL-2002;
                                                                                                                                         28-AUG-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                489
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New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,

Example 12; SEQ ID NO 146; 214pp; English.

asthma, or infections

Rieger DK;

Ort I, Padigaru M,

Guo X, Anderson DW,

Zhong M, (CURA-)

WPI; 2004-315567/29.

2002US-0409544P. 2002US-0410320P. 2002US-0411060P. 2002US-0412766P. 2002US-0412825P. 2002US-0413342P.

12-SEP-2002; 16-SEP-2002; 23-SEP-2002; 24-SEP-2002; 25-SEP-2002;

10-SEP-2002;

30-SEP-2002; 2002US-0414832P

CURAGEN CORP.

09-SEP-2003; 2003WO-US028141

WO2004022723-A2 Homo sapiens.

18-MAR-2004

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The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, antoractaric, hypotensive, antistateriosclerotic, anorectic, cardiant, hypotensive, antistateriosclerotic, nootropic, controlated, antidiatement, osteopathic, antistarkinatory, dermatological, antistamatic, and antisological, antistamatic, and antisological artistary. The polypeptides, nucleic acid molecules and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, contential, and protocoal), anorexta, cancer, cardiovascular diseases (hypertension, atherosclerosis), neurodegenerative disorders, altherimer's disease, parkinson's disease, epilepsy, immune disorders and polypeptides or sathma, and various dyslipidaemias. The nucleic acids and polypeptides for the identification of small molecules that modulate or inhibit e.g. neurogenesis, call differentiation, hamalogical, wound healing and angiogenesis, in gene therapy, in generation of antibodies that bind immunospecifically to NoVX substances for use in therapetic or diagnostic methods. The nucleic calcing and angiogenesis, in generation or anity prophesi, in probas, in chromosome mapping.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acids are further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The NOVX polypeptides of the invention show homology to certain known human proteins: NOV1a-1t show homology to fibroblast growth factor receptor (FGFR4); NOV2a shows homology to complement factor I precursor; NOV3a shows homology to matrix metalloproteinase-15 precursor; NOV3a shows homology to matrix metalloproteinase-15 precursor; NOV4a-5c show homology to 1-lymphocyte surface antigen Ly-9 precursor; NOV6a-5c show homology to fibroblast growth factor-21 (FGF-21); NOV7a-7c show homology to fibroblast growth factor-21 polypeptide variant; NOV8a-8g show homology to antileukoproteinase I precursor; NOV9a-9i show homology to antileukoproteinase I precursor; NOV9a-9i show homology to LIV-1 protein; NOV10a shows homology to nuclear hormone receptor NOR-1; NOV11a-11j show homology to
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ADL57201 standard; DNA; 22 BP

(first entry)

03-JUN-2004

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The invention relates to identifying a compound comprising exposing cell expressing gene 1 having enhancing or suppression effect on an APPL-SV Denotype (a transgenic fruit fly expression the Amyloid precursor-like protein, APP, as a fusion protein with the suppressor of hairless transcription factor, Su(H) and V916 activation domain. The fusion correctly protein is clawed by gamma secretase (encoded by the Psn gene) to release the Su(H-VP16, which affects wing vein development. Genes affecting Psn expression/activity were screened by crossing the APP-SV correctly psn expression/activity were screened by crossing the APP-SV line with an EP P-element insertion library, and the DNA recovered from the appropriate EP strain and sequenced) chosen from AD000864, correctly appropriate and fruit fly genes affecting APP processing and their mammalian homologues, identifying modulation of Alzheimer's disease (AD) correctly associated with AD relative to cell in absence of agent. Also included are regulating AD (involves providing a subject with AD or CC symptoms of AD and an agent that changes the expression of a gene certailed above or changes the activity of a polypeptide having a sequence chosen from AD000865-AD001066, and treating the subject with the agent) cand a composition (comprising a nucleic acid encoding a polypeptide
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transmembrane protein-like; NOV12a-12c show homology to beta-necendorphin -dynorphin precursor. The present sequence represents a PCR primer used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Identifying compound by exposing cell that expresses gene having enhancing or suppression effect on APPL-SV phenotype to agent, identifying modulation of Alzheimer's disease (AD), regulation of gene or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fruit fly; ss; PCR; Alzheimer's disease; Gamma secretase; Psn gene; P-element; EP; APPL-SV; Amyloid precursor-like protein; APP; suppressor of hairless transcription factor; Su(H); VP16 activation domain; dementia; memory loss; language deterioration;
                                                                                                                                                                       Gaps
                                                                                                                                                                     ö
                                                                                                                              Length 22
                                                                                                                                                                     3; Indels
                                                                                  Sequence 22 BP; 9 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Drosophila P-element, EP, inverse PCR primer 5F3.
                                                                                                                          0.9%; Score 15.2; DB 1;
15.0%; Pred. No. 6.3e+02;
                                                                                                                                                                     0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            impaired visuospatial skill; primer.
                                                                                                                                                                                                          836 TIGICITIGAGIACCIGGAC 855
                                                                                                                                                                                                                                       21 TIGICITIGAGCAICTIGAC 2
                                                                                                                                                                                                                                                                                                                                                          BP.
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                                                                                                                                             85.0%;
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                                                                                                                     Query Match 0.95
Best Local Similarity 85.05
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                 ADC01072;
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detailed above or an expression vector comprising the nucleic acid or a host cell comprising the expression vector or an antisense oligonucleotide that hybridises under stringent conditions to the nucleic acid or polypeptide or an antibody that specifically binds to the polypeptide. The method is useful for identifying compounds modulating symptom of Alzahmer's disease (AD), regulation of biological pathway associated with AD, or regulation of gene expression or protein function of gene or protein associated with AD. The nucleic acids and proteins are useful in drug screening and useful in screening and treating the subject having increased susceptibility to AD or symptoms of AD such as dementia, memory loss, language deterioration and impaired visuospatial skills. The present sequence is a PCR primer used to amplify fruit fly DNA flanking
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a method of identifying compounds that influence fat cell number or size comprising providing a cell that expresses a gene and an agent, exposing the cell to the agent and identifying fat cell number or size relative to cells not exposed to the agent. The method also comprises providing an expression vector and an agent, exposing the vector to the agent, detecting a change in expression of the gene relative to expression of the gene in an expression vector not exposed to the agent, treating a subject with the agent and identifying fat cell number or size in the subject. The agent comprises an antisense oligonucleotide. The subject comprises a mammal, preferably a human. The method also comprises providing a polypeptide and an agent, exposing the polypeptide to the agent, detecting binding of the agent to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Identifying compounds that influence fat cell number or size for treating or preventing obesity or diabetes by exposing the cell to the agent and identifying fat cell number or size relative to cells not exposed to the
                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fly, PCR; ss, fat cell number; fat cell size; obesity; diabetes; anorectic; antidiabetic; primer.
                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.2; DB 1; Length 22; B5.0%; Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                     3;
                                                                                                                                                                                                                                                                                                Sequence 22 BP; 9 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                          1522 GAGATTCAGCTACAAAGGA 1541
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GAGATGCATCTACACAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP
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                                                                                                                                                                                                                                                                                                                                                                                   17; Conservative
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                                                                                                                                                                                                                                                         an EP insertion site.
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                                                                                                                                                                                                                                                                                                                                                       Best_Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kim J, Galant R;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fly DNA PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO08110:
                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Diptera.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADO08110
ID ADO0
        88333333333333333
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Sequence 22 BP; 0 A; 6 C; 5 G; 10 T; 1 U; 0 Other;

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The invention relates to a method of targeting an antisense oligonucleotide to hepatic tissues involving conjugating the oligonucleotide to a cholesteryl moiety and administering the conjugate. The method is useful for targeting an antisense oligonucleotide to hepatic tissues to modulate the expression of a gene in the liver. The oligonucleotide is useful in diagnostics, therapeutics, as research reagents and kits, in pharmaceutical composition and for treating diseases produced by undesired production of proteins. The method provides lipophilic oligonucleotide conjugates with improved biostability and altered blodistribution in mammals. The present sequence represents a modified oligonucleotide used for NMR analysis.
                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Targeting an antisense oligonucleotide to hepatic tissues to modulate the expression of a gene in the liver involves conjugating the oligonucleotide to a cholesteryl moiety and administering the conjugate.
polypeptide or a change in an activity of the polypeptide, treating a subject with the agent and identifying fat cell number or size in the subject. The agent comprises an antibody. A method of regulating fat cell number or size comprises providing a subject containing fat cells and an agent that changes the expression of a gene, and treating the subject with the agent under conditions so that fat cell size or number in the subject is altered. The method is useful for identifying compounds that influence fat cell number or size, for preparing a composition for treating or preventing obesity or diabetes. This sequence represents a PCR primer used to amplify fly DNA used in the scope of the invention.
                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ss, antisense, hepatic tissue targeting, liver gene expression, improved biostability, altered biodistribution; DNA-RNA hybrid.
                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                 0.9%; Score 15.2; DB 1; Length 22; 85.0%; Pred. No. 6.3e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified oligonucleotide used for NMR analysis #6.
                                                                                                                                                                                                                              Sequence 22 BP; 9 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 7; SEQ ID NO 19; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cook PD, Manoharan M, Bennett CF;
                                                                                                                                                                                                                                                                                                                                                    1522 GAGATTCAGCTACAAAGGA 1541
                                                                                                                                                                                                                                                                                                                                                                                     1 gagargcarcracacaagga 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADQ16470 standard; DNA; 22 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-APR-2000; 2000US-00546596.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-00928823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                      Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-466815/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US6753423-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADQ16470;
                                                                                                                                                                                                                                                                        Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADQ16470/c
ID ADQ164
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              8X88888888888X8
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The present invention describes a method for detecting an analyte in a sample. The method comprises: (a) providing detection probes being to labelled with a first reporter, where the detection probes are capable of binding to the analyte; (b) providing a solid support; (c) providing capture probes being bound or capable of binding to the solid support; (c) providing concentrating the analyte on the solid support; (d) contacting the sample of concentrating the detection probes, the solid support; (d) contacting the detection probes where (i) the detection probes; and (e) detecting the detection probes where (i) the detection of detection probes in the presence of quenching probes binding to surplus detection probes on to being bound to the analyte and thereby contacted in the presence of quenching probes binding to surplus detection probes; and/or (ii) the solid support is labelled with capture detection probes, and/or (ii) the solid support is labelled with capture a second reporter different from the first reporter; imaging the sample of at an emission wavelength of the second reporter and applying this mask to an image of the sample used for reporter and applying this mask to an image of the sample actual capture
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Detecting an analyte such as protein or nucleic acid, useful for screening drugs, comprises probe detection of captured analyte where surplus probe signal is quenched and/or differential emission wavelength
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                           analyte detection; detection; probe; detection probe; reporter;
                                         .;
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/note= "5' labelled with rhodamine-6G (Rh6G)"
Query Match 0.9%; Score 15.2; DB 1; Length 22; Best Local Similarity 85.0%; Pred. No. 6.3e+02; Matches 17; Conservative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gall
                                                                                                                                                                                                                                                                                                                          C-fos mRNA detection capture oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jaeger S,
                                                                                                                                                                                                                                                                                                                                                                                 capture oligonucleotide; human; c-fos; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 20; 61pp; English.
                                                                                130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Droege S,
                                                                                                                 22 cechachachachachace 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of labeled support is measured.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-DEC-2003; 2003WO-EP014661.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-DEC-2002; 2002EP-00028582.
13-JAN-2003; 2003US-0439439P.
                                                                                                                                                                                                             ADQ31052 standard; DNA; 22
                                                                                                                                                                                                                                                                                         23-SEP-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EVOT-) EVOTEC OAI AG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified base
                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hinnah S,
                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                      ADQ31052;
                                                                                                                                                                             RESULT 493
                                                                                                                                                                                                                                                                                                                                                                                                                          Homo
                                                                                                                                                                                                 ADQ31052
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23 ACNYTNTGGTAYMGNGCNCCNGA

BP.

AAT94132 standard; DNA; 23

RESULT 495 AAT94132/c

AAT94132;

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Six Candida genes have been isolated, which encode an apparent CDC25 phosphatase (TYP1), a p13suc1 homolog (CKS1), a cyclin dependent kinase (CDK-11), a CYCLIN (CDR-1), a CDK-activating kinase catalytic subunit (CDK-11), and a Map kinase (CMK1) (AAT64446 to AAT64451). The TYP1 (MOC1), and a Map kinase (CMK1) (AAT644464). The TYP1 is at least 75% to homologous to the amino acid sequence given in Seq 2, according to the claims of the specification. According to the disclosure, Seq 2 encodes CKS1 (AAT64446) and Seq 1 encodes TYP1 (AAT64447). The products may be used in reagents and assays which permit the rapid detection and cavaluation of Candida yeast infections and for identifying cpds. which have antifungal properties and which may be used as anti-mycotic agents. Such agents can be used therapeutically, as well as, for example, such agents in foodstuff, feed supplement for promoting weight gain in livestock, or in disinfectant formulations for treatment of non-living matter, e.g. for decontaminating hospital equiment and rooms
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      an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Candida cell-cycle regulatory proteins - used to develop prods. for the diagnosis, treatment and prevention of fungal infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYP1; CKS1; CDK1; CYB1; MOC1; CMK1; cell-cycle regulatory protein; Candida; anti-mycotic; antifungal; preservative; yeast; cyclin; kinase;
oligonucleotide used in the detection of c-fos mRNA, which is used in
                                                                                                                                      Gaps
                                                                                                                                        ö
                                                                                             Query Match 0.9%; Score 15.2; DB 1; Length 22; Best Local Similarity 85.0%; Pred. No. 6.3e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.9%; Score 15.2; DB 1; Length 23; Best Local Similarity 60.9%; Pred. No. 6.5e+02; Matches 14; Conservative 3; Mismatches 6; Indels
                                                        Sequence 22 BP; 5 A; 4 C; 9 G; 4 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 23 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 8 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Draetta G;
                  example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 3; Page 35; 70pp; English.
                                                                                                                                                                          873 CCTGGATGACTGTGGGAACA 892
                                                                                                                                                                                                               1 cerddardargerddaaca 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96WO-US008807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95US-00463090
                                                                                                                                                                                                                                                                                                                 AAT58215 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                        20-MAY-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                               Candida CDK1 gene primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Damagnez V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MITO-) MITOTIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1997-043149/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              phosphatase; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9639527-A1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cottarel G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                       AAT58215;
                                                                                                                                                                                                                                                                          RESULT 494
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The present sequence is a primer for the cDNA encoding a haematopoietic cytokine receptor Zcytorl, useful for ligand detection, and pathological condition diagnosis, including cancer. Receptor agonists of the protein can be used to stimulate the proliferation and development of target cells in vitro and in vivo. The agonists can stimulate cell mediated immunity and lymphocyte proliferation, to treat infection involving immunosuppression, e.g. viral infections. They may also be used to suppress tumours, induce cytoxicity, treat leukopaenias and enhance the regeneration of the T-cell repertoire after bone marrow transplantation. Antagonists of the protein may be used to suppress the immune system, treat autoimmune diseases, including rheumatoid arthritis, multiple acclarosis and diabetes mellitis. Immune suppression caused by the antagonists can also be used to reduce rejection of tissue or organ transplants and grafts, and to treat T-cell specific leukaemias and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                              Haematopoietic cytokine receptor - useful for ligand detection, and pathological condition diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
                                                                               Primer 9826 for haematopoietic cytokine receptor Zcytorl cDNA.
                                                                                                                Haematopoietic cytokine receptor; Zcytor1; ligand detection; cancer diagnosis; agonist; antagonist; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                             Grant FJ, Sprecher CA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 23 BP; 4 A; 5 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 15.2; DB 1;
Pred. No. 6.5e+02;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 5; Page 65; 86pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCCACGAGCAGTTCAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ23767 standard; DNA; 23 BP.
                                                                                                                                                                                                                                                                                 97WO-US008502.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%;
                                                                                                                                                                                                                                                                                                                                                                               Saumgartner JW, Foster DC,
                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                               (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-018509/02.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                              23-MAY-1996;
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                                               22-MAY-1998
                                                                                                                                                                                                                                               27-NOV-1997
                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ymphomas
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Gaps

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1093 ACACTGTGGTACCGGCCCCTGA 1115

Sullivan D;

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Berlin V, Cottarel G,
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                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                              AAA97452;
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                                                                                                                                          Query Match
                                                                                                                                                                                                                           RESULT 498
                                                                                                                                                            Matches
                                                                                                                                                                                                                                    AAA97452,
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                                                                                                                                                                                                                                                   This invention describes a novel method for generating an antisense library targeted to a selected RNA transcript. The methods can be used for identifying antisense agents and for identifying target sites for antisense-mediated inhibition of a selected gene. The use of a direct library for target site selection significantly simplifies the screening process, since only very small libraries need be prepared and assayed.

AAZ23765-Z23767 represent multiple cloning site DNA regions used in the
                                                                                                                                                                                                Production of antisense libraries, used for identifying antisense agents and for identifying target sites for antisense-mediated inhibition of a
                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cell cycle regulatory protein; CDK1 gene; cyclin dependent kinase;
Candida; isolate; clone; degenerate primer; genomic DNA; amplify; ss.
                  Antisense; DNA library; identification; multiple cloning site; MCS;
                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Degenerate PCR primer-1 used for cloning of Candida CDK1 gene.
                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.2; DB 1; Length 23; 85.0%; Pred. No. 6.5e+02;
                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                   Sequence 23 BP; 8 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
Cloning vector multiple cloning site 3 DNA.
                                                                                                                                                                                                                                                                                                                                                                                         364 GAGAGTGACCAGGCTTCAGC 383
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                                                                                                                                                              2;
                                                                                                                                                                                                                                    Claim 3; Page 37; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                   GACAGTCACCAAGCTTCAGC
                                                                                                                                                              Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ08273 standard; DNA; 23 BP
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                                                                                                                  98US-0079792P.
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                                                                                                 99WO-US006742
                                                                                                                                           (UTAH ) UNIV UTAH RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                              Pierce ML,
                                                                                                                                                                                                                                                                                                                   method of the invention
                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
....hes 17; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MITO-) MITOTIX INC
                                                                                                                                                                               WPI; 1999-610866/52
                           inhibition; ss
                                                                                                                                                                                                                   selected gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-MAY-1999;
                                                              WO9950457-A1
                                                                                                                  28-MAR-1998;
06-NOV-1998;
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                                                                                                28-MAR-1999;
                                                                                                                                                              Ruffner DE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-NOV-11999
                                                                                07-0CT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ08273;
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Germacrene A synthases plays a key role in the biosynthesis of seguiterpene lactones, catalysing the formation of a germacrane biosynthetic precursor from farmesyl diphosphate (FDP). Sesquiterpene lactones are bitter- flavoured plant products which provide resistance against insects, nematodes, microorganisms and vertebrate herbivores, and are also involved in plant-plant interactions. Nucleic acids encoding chicory germacrene A synthases A and B are useful for the production of transgenic plants with modified sesquiterpenoid synthase activity.
                                                                                                                                                                                                                                                                                                                 The present DNA sequence is the degenerate PCR primer-1, used to clone Candida cyclin dependent kinase, CDK1 gene. It is a cell cycle regulatory protein isolated from the genomic DNA of Candida albicans and was
                                                                                                                                           New Candida cyclin activated kinase 1, useful for generating vaccines and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chicory; short germacrene A synthase clone; germacrene A synthase A; sesquiterpene lactone biosynthesis; bitterness; pest resistance; insect; nematode; micro-organism; flavour compound; fragrance; phytoalexin; transgenic plant; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to two chicory germacrene A synthases (AAB23174,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel sesquiterpenoid synthase genes useful for reducing bitterness a increasing resistance against insects, nematodes, microorganisms and vertebrate herbivores in plants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.9%; Score 15.2; DB 1; Length 23; 60.9%; Pred. No. 6.5e+02; Atlive 3; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chicory germacrene A synthase A PCR primer, SEQ ID NO:11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 23 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 8 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ABDL-) AB-DLO RES INST AGROBIOLOGY & SOIL FERTI.
Rudolph J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ۵,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1093 ACACTGTGGTACCGGCCCCTGA 1115
Damagnez V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        De Kraker
                                                                                                                                                                                                                                                        Example 3; Page 58; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      || :| |||||::| || || || ACNYTNTGGTAYMGNGCNCCNGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 3; Page 33; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                 screening for its inhibitors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-MAR-2000; 2000WO-EP002130
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bouwmeester H, Kodde J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA97452 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-638203/61.
                                                                       WPI; 2000-038847/03
                                                                                                                                                                                                                                                                                                                                                                                                                                     amplified using PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
nes 14; Conserv
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Reduction of germacrene A synthase expression (e.g., via the use of antisense sequences) can be used to reduce bitter flavours in crops, thus increasing their commercial value. Increased germacrene A synthase expression may be used to obtain increased insect, nematode or microorganism resistance in plants, to obtain increased formation of segquiterpene lactones with desirable properties (e.g., medicinal properties), and to obtain increased formation of germacrene A-derived Indoor and fragrance compounds or phytoalexins. Sequences AAA97452.
A97453 represent PCR primers used in an exemplification of the invention to introduce restriction sites into the chicory germacrene A synthase A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; transcription activation; immunoglobulin E; IgE; IgE receptor;
Fc-epsilonRI; USF-1; USF-2; allergy; ss.
                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA having a transcription activating region of a gene, used for developing an agent for preventing and treating allergic diseases
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                                                                                                                                                0.9%; Score 15.2; DB 1; Length 23; 85.0%; Pred. No. 6.5e+02;
                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                  Human Fc-epsilonRI alpha-chain gene oligonucleotide #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 23 BP; 3 A; 12 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                            Sequence 23 BP; 4 A; 9 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 4; Page 6; 12pp; Japanese.
                                                                                                                                                                                           116 CGATCGCCATGGATCGGATG 135
                                                                                                                                                                                                        21 CGAGAGCCATGGTTCGGATG 2
                                                                                                      CDNA (AAA97448) for subcloning
                                                                                                                                                                                                                                                                     ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                     99JP-00234854
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ASAK ) ASAHI BREWERIES LTD.
(TSUR/) TSURA T.
                                                                                                                                                                                                                                                                    AAH19543 standard; DNA; 23
                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-310666/33
                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                           JP2001057889-A.
                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-AUG-1999;
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                                                                                                                                                                                                                                                                                                             23-JUL-2001
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                                                                                                                                                                                                                                                                                        AAH19543;
                                                                                                                                                Query Match
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Matches
                                                                                                                                                                                                                                               RESULT 499
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 886666666668888
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sequence which activates transcription of human high affinity immunoglobulin (Ig)E receptor (FC-epsilonRI) alpha-chain gene. It may be used for inhibiting the activation of transcription relating to USF-1 or USF-2. The DNA contains the sequence tggggagcagctggggtaggaac, or cagctg. The invention is useful for the development of an agent for preventing and treating allergic diseases. The present sequence was annealed to its complementary sequence to generate the double stranded DNA sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
                                                                                                                                                                                         Human; transcription activation; immunoglobulin E; IgE; IgE receptor;
Fc-epsilonRI; USF-1; USF-2; allergy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is provided in a specification relating to a DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA having a transcription activating region of a gene, used for developing an agent for preventing and treating allergic diseases.
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Pred. No. 6.5e+02;
); Mismatches 3; Indels
                                                                                                                                                 Human Fc-epsilonRI alpha-chain gene oligonucleotide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 23 BP; 5 A; 3 C; 12 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human chromosome 1p36-35 PCR primer SEQ ID NO:292.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 4; Page 5-6; 12pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     918 GITCCTGTTCCAGCTGCTCC 937
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                    BP
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                                                                                                      (first entry)
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                    AAF99964 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BREWERIES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                      JP2001057889-A.
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(TSUR/) TSURA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the invention
                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                        23-AUG-1999;
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                                                                                                      23-JUL-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                primer;
                                                             AAF99964;
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Matches
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AAF99964/
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Gaps

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918 GITCCIGITCCAGCIGCICC 937

Best Local Similarity 85.0 Matches 17; Conservative

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                                                                                                                                                                                                 The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in method comprises: (a) clones of the genomic libraries contained in continuities by a primer designed based on the chromosome marker multiwell plates; (b) a primer designed based on the chromosome marker containing the corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. to array the multiwell conferrination Nos. are maxed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the creanstituted as the positions on the chromosome and arrayed. The clones are reconstituted as the positions on the chromosome and arrayed. The crones are mixed for gene analysis. ABH42957 to ABH45321 represent per represent propresent propresent propresent propresent present propresent propresent invention crops primers for human chromosome 21q22.1, which are specified for use in the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense PCR primer used in the creation of 11betaHSD2 mice.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 15.2; DB 1; Length 23; 85.0%; Pred. No. 6.5e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 23 BP; 11 A; 10 C; 1 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1063 CCAACAAGACATACTCCAA 1082
                                                                                                                                                                                Claim 4; Page 10; 528pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccaaccadacacaarccaa 20
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11-FEB-2003; 2003US-00361848.
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                                                12-MAR-2001; 2001JP-00068285
                                                                        10-MAR-2000; 2000JP-00066716
                                                                                               (RIKA ) RIKAGAKU KENKYUSHO.
(GENO-) GENOTEX YG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                           Arraying genome clones.
                                                                                                                                   WPI; 2002-144136/19
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  JP2001321190-A
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                         20-NOV-2001
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                                                                                                                                                                                 New transgenic mouse expressing an increased activity of enzyme 11-beta hydroxysteroid dehydrogenase 2 in its heart, useful as a model system for identifying and developing new drugs for treating cardiac dysfunction.
                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a transgenic mouse which expresses an increased amount of enzyme activity of 11-beta hydroxysteroid dehydrogenase type 2 (11betaHSD2) in its heart relative to a non-transgenic isogenic mouse. The transgenic isogenic mouse is useful as a model system for identifying and developing new drugs for treating cardiac dysfunction. The present sequence is a PCR primer used in the creation of 11betaHSD2 mice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Poxicologically relevant gene; toxicological response; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a method (M1) for determining a toxicological response to an agent, which comprises comparing the expression profile of one or more human toxic response genes to a reference gene expression profile indicative of toxicity, and so determining the presence of a toxic response to the agent. Also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dunn RI, Adkins K, Pickett GG, Kier LD, Schmeiser K;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 23 BP; 7 A; 8 C; 7 G; 1 T; 0 U; 0 Other;
                                                            Rudolph AE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Poxicologically relevant rat PCR primer #1314.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
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                                                            Goellner J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 334; 455pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             237 TGGTGGCGCCAGTGACCCTG 256
                                                                                                                                                                                                                                                                                                                           Example 1; Page 9; 35pp; English.
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                                                               Wenning Q,
(PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-268322/26.
                                                                                                                               WPI; 2003-671623/63
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                                                            Mcmahon EG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus sp.
Synthetic.
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Alen P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABZ84155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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described: (1) an array comprising one or more polynucleotides selected from the genes corresponding to the partial sequences given in ABZ82842 to ABZ84764, or their fragments of at least 20 nucleotides, or homologues; and (2) determining if a gene putatively identified to be a toxic response gene plays a role on toxic response pathways by determining the expression profile of the gene after exposure of cells or a human subject to a known toxic pharmaceutical or industrial agent, comprising: (a) exposing cells to an agent or isolating cells from a human subject who was exposed to an agent; (b) obtaining the test gene expression profile for a putatively identified toxic response gene after exposure to a known toxic pharmaceutical or industrial agent; and (c) comparing the test profile to the expression profile of a gene with a similar function or comparing the test profile to the expression profile of a gene with a similar function or exposure to other known toxic compounds. The methods are useful for predicting and determining toxicological responses on a cellular, organ to review the arrays comprising the human genes are useful for the review of the paramaceutical comparing the human genes are useful for the review of the paramaceutical comparising the human genes are useful for the review of the paramaceutical comparisor of the paramaceutical comparisor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         toxicological screening of drugs, pharmaceutical compounds and chemicals
                %$$$$$$$$$$$$$$$$$$$$$$$
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Gaps . 0.9%; Score 15.2; DB 1; Length 23; 35.0%; Pred. No. 6.5e+02; 3; Indels Sequence 23 BP; 3 A; 7 C; 7 G; 6 T; 0 U; 0 Other; 0; Mismatches 85.08; Local Similarity 85.0 nes 17; Conservative Query Match Matches ò

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845 AGTACCTGGACAAGGACCTG 864 22 AGTCGCCGGACAAGGACCTG 3 d

ADM32957 standard; DNA; 23 (first entry) 17-JUN-2004 ADM32957; ADM32957/

BP.

PCR primer P74 used to amplify 150bp cDNA encoding To32 N-terminal.

protein production; moss; protoplast; To32 protein; thaumatin-like protein; PCR; primer; ss.

Synthetic

WO2004024927-A1.

25-MAR-2004.

38-SEP-2003; 2003WO-EP009959.

12-SEP-2002; 2002EP-00020382. 11-JUL-2003; 2003EP-00015881.

(GREE-) GREENOVATION BIOTECH GMBH.

Gorr G, Launhardt H,

WPI; 2004-270051/25.

Achieving transient expression of at least an extracellular non-plant protein from a heterologous nucleotide sequence in moss protoplast comprises transiently introducing into the protoplast a heterologous nucleic acid construct.

Disclosure; Page 18; 49pp; English.

The specification describes a method for the production of extracellular non-plant protein from moss protoplasts. The method comprises transiently introducing into the protoplast a heterologous nucleotide sequence operably linked to a promorter. The heterologous nucleotide sequence encodes a protein selected from heterodimer, fusion antibody, immunoglobulin or single-chain antibody. The method is useful for protein production. PCR primers

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The invention relates to a compound for silencing a gene comprising a single-stranded nucleic acid molecule having a 3' end, a 5' end and a cargeting region positioned between the 3' end and the 5' end, where the targeting region comprises a sequence trargeted to a target region in the cargeting region comprises a sequence trargeted to a target region in the center and the 3' end and the 5' end each comprise a sequence that enables the formation of a hairpin structure. Also included are a recombinant vector comprising a mucleic acid encoding the compound cited above, a chost cell comprising the mucleic acid mentioned above, an oligonucleotide having the structure H 2 - R 1 - H 1 (where R 1 is an oligonucleotide having the structure H 2 - R 1 - H 1 (where R 1 is an oligonucleotide consisting essentially of RNA or DNA of about 8-50 nucleotides configured to silence a substrate mucleic acid, and where H 1 and H 2 are oligonucleotides having sequences that enable the formation of a hairpin structure), a pharmaceutical composition for silencing agene (comprising a pane in a cell. The composition and method are useful for gene silencing purposes. RNA (e.g. siRNA) and DNA oligonucleotides are provided which are useful in silencing the RMP9 (not defined) gene targeting the F9 region. The present sequence is a multiple cloning site which is inserted into a vector, used to express libraries of antisense oligonucleotides which are vector.
                                                                                                                                                               ö
ADM32956-ADM32957 were used to amplify a 150 bp fragment of cDNA encoding
the N-terminal of a plant thaumatin-like To32 protein, in the course of
the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New sequence-specific oligonucleotide for silencing genes comprises a 3' end a 5' end and a targeting region positioned between the 3' end and
                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Multiple cloning site for antisense/hairpin oligonucleotides #3.
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0
                                                                                                                    Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RNA interference; gene silencing; MMP9; ds; hairpin; siRNA.
                                                                         Sequence 23 BP; 7 A; 6 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                0.9%; Score 15.2; DB 1;
85.0%; Pred. No. 6.5e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; SEQ ID NO 13; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prakash RK;
                                                                                                                                                                                                916 CIGITCCIGITCCAGCIGCT 935
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                                                                                                                                                                                                                       21 CTGACCCTGGTCCAGCTGCT
                                                                                                                                                                                                                                                                                                                                         BP.
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                                                                                                                                                                                                                                                                                                                                     ADM10656 standard; DNA; 23
                                                                                                      Query Match
Best Local Similarity 85.0'
                                                                                                                                                                                                                                                                                                                                                                                                                 15-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Koehn RK, Ruffner DE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KOEH/) KOEHN R K.
(RUFF/) RUFFNER D E.
(PRAK/) PRAKASH R K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-340007/31
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5'end.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
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Gaps

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Indels

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Mismatches

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Conservative

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Matches
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                                                                                                                                                                                                                                                                                            cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; Boorlasis; pilaris; growth factor mediated cell prolliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                    Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
                                                     Gaps
                                                     ;
0
                         Length 23;
                         Score 15.2; DB 1; Length 2
Pred. No. 6.5e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 2 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
  BP; 8 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 8; Page 71; 201pp; English
                                                                              364 GAGAGTGACCAGGCTTCAGC 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vessels or any other hyperplasia
                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0140345P.
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                            0.9%;
                                                                                                                                                                                                                                                          IGF-I oligonucleotide #1578.
                                                                                                                                                                                                                                 (first entry)
                          Query Match
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Werther GA,
                                                                                                                                                                           AAF50618 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200078341-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-JUN-1999;
                                                                                                                                                                                                                                 30-MAR-2001
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  Sequence 23
                                                                                                                                                                                                       AAF50618;
                                                                                                                                                     RESULT 506
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DB 1; Length 15; 4.8e+02;

0.9%; Score 15; 100.0%; Pred. No.

Query Match Best Local Similarity

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGFB]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AARASIS1 and AAFASIS3-F851G1). The method is useful for ameliorating the effects of psoriasis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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100.0%; Pred. No. 4.8e+02;
ive 0; Mismatches 0;
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1101 GTACCGGCCCCTGA 1115
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                                                                                                                                                                                                                                                                                                                                                                                                                                     IGF-I oligonucleotide #1577
                                                                                                                                                                                                                                      AAF50617 standard; DNA; 15
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                                                                                                                                                                       RESULT 507
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BP.

(first entry)

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1102 TACCGGCCCCTGAC 1116
                                                                              RESULT 509
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racceccccreac 15

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Gaps ;

0; Indels

Mismatches

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15; Conservative

100.08;

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Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot.Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; PCR; primer; ss.
                                                                                                                                                                   Human PCTAIRE protein kinase 1 DNA specific forward PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-DEC-2002; 2002WO-US039138.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-DEC-2001; 2001US-00017621
                        AAL61692 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                      WO2003049691-A2.
                                                                                                                     22-SEP-2003
                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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                                                                         AAL61692;
       AAL61692
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                                                                                                                                                                                                                                                                                               Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; vytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonuclectide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB9]-2 or IGFB93), which is capable of inflammation or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, nearly antisense of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, nearly antisense of pso
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15; DB 1; Length 15; 00.0%; Pred. No. 4.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 2 A; 8 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MURD-) MURDOCH CHILDRENS RES INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 8; Page 71; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     vessels or any other hyperplasia
                                                                                                                  ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-0140345P.
                                                                                                                                                                                                                                                        IGF-I oligonucleotide #1579.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-JUN-2000; 2000WO-AU000693
GGTACCGGCCCCCTG 15
                                                                                                                AAF50619 standard; DNA; 15
                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wraight CJ,
                                                                                                                                                                                                             30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-DEC-2000
                                                                                                                                                            AAF50619;
                                                                 RESULT 508
                                                                                          AAF50619
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                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein kinsel, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Adrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is human PCTAIRE protein kinase 1 DNA specific PCR primer. This sequence is used to illustrate the method of the invention
                                                                                                                                      New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15; DB 1; Length 15;
100.0%; Pred. No. 4.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 1 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human G-alpha-12 antisense inhibitor ISIS# 20658.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Preu. ...
                                                                                                                                                                                                                                                                                                                  Example 13; Page 71; 104pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95 AGGTTGCTCGCGCGC 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AGGTTGCTCGCGCGC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ57670 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-APR-2000 (first entry)
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Les 15; Conservative
Roach MP;
                                                                   WPI; 2003-577271/54.
                                                                                                                                                                                                                                              thrombocytopenia.
Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ57670;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 510
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This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a member of the G12/13 subfamily of G-proteins. The primary function of G-bipha-12 is in cell differentiation and growth. The invention relates to antisense compounds which are 8-30 nucleotides long (see AAZ57668-257746). The antisense molecules are targeted to the human G-alpha-12 molecules, and inhibit the expression of G-alpha-12. The molecules preferably have a modified internucleotide linkage, and at least one modified sugar moiety. The compounds target different regions of the human G-alpha-12 RNA. The expression of human G-alpha-12 is inhibited by contacting human cells or tissues in vitro with the artisense molecules. The oligonucleotides are used in modulating the function of nucleic acid molecules encoding G-alpha-12, ultimately modulating the amount of G-alpha-12 produced. The antisense compounds can be utilized for diagnostics, therapeutics, prophylaxis and as research agents and kits. They may be useful in the treatment of cancer, and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antibacterial; vaccine; mmpL6; Mycobacterium; BCG; TbD1; ss; PCR; primer.
           G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer; cell growth; metastatic growth; ss; ISIS# 20658.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%; Score 15; DB 1; Length 18;
100.0%; Pred. No. 5.7e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                            Antisense inhibition of human G-alpha-12 expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18 BP; 4 A; 4 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            M. tuberculosis PCR primer RvD4-intR-PPE.
                                                                                                                                                                                                                                                                                                                                                            Example 15; Col 38; 36pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADM57525 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1633 AGCAGGCAGCGCTG 1647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-FEB-2002; 2002EP-00290458.
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                                                                                                                                                                                             99US-00256496.
                                                                                                                                                               99US-00256496.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mycobacterium tuberculosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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Best Local Similarity 100.
                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                             WPI; 2000-095920/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              metastatic growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EP1338657-A1
                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-JUN-2004
                                                                                                                                                               23-FEB-1999;
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                                                                                              USS998206-A.
                                                                                                                                07-DEC-1999
                                                                                                                                                                                                                                                                Cowsert LM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 511
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The invention relates to a novel isolated or purified nucleic acid. A polypeptide encoded by a nucleic acid of the invention has antibacterial activity, and may have a use in a vaccine. The nucleic acid is a TbD1 nucleic acid having a fully defined sequence of 3953 bp given in the specification. The TbD1 deletion or mmpL6 551 polymorphism is useful as a genetic marker for the differentiation of Mycobacterium strain of M. Copacition with at least one tuberculosis complex. The genetic marker is ablected from RD1, RD2, RD3, RD4, RD5, RD6, RD7, RD8, C genetic markers selected from RD1, RVD2, RVD3, RVD5, RVD5,
                                                                                                                                                               New TbD1 nucleic acids having the mutation CTG to CGG at codon 463 of gene katG, useful for distinguishing Mycobacterium tuberculosis infection from M. africanum, M. canetti, M. microti, M. bovis, or M. bovis BCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ribozyme, hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.9%; Score 15; DB 1; Length 18;
100.0%; Pred. No. 5.7e+02;
ive 0; Mismatches 0; Indels
                                                                  Garnier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 0 A; 4 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Robbins JM;
                                                                  Gordon S, Eiglmeier K,
                                                                                                                                                                                                                                                                                          Disclosure; Page 21; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.08; Pr.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cdk2 ribozyme binding site #55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US028772
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          232 GGTGGTGGTGGCGGC 246
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA82618 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
'...hes 15; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Welch PJ,
                    (INSP ) INST PASTEUR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-412314/35.
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                                                                                                                      WPI; 2003-699254/67
                                                                     Brosch R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200032765-A2.
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                                                                     Cole S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA82618
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RESULT 51
AAQ15415
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferarive disease; skin disease; sporiasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antipsoriatis; dermatological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                               The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDKI, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA88415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a riboxyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP). cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic,
                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:204.
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0
                                                                                                                                                                                                                    DB 1; Length 19; 6e+02;
                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                  Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                             100.0%; Preq. ...
                                                                                                                                                                                                                  0.9%; Score 15;
100.0%; Pred. No.
 Disclosure; Page 49; 109pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                      BP.
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                                                                                                                                                                                                                                                                                    922 CIGITCCAGCIGCIC 936
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                                                                                                                                                                                                                                                                                                                                                                                                   AAH57780 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                  Local Similarity 100.
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                                                                                                                                                  restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (IMMIN-) IMMINSOF INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-SEP-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH57780;
                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                   Matches
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$X55555555X8
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dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, virreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This is one of 12 probes which differ only in the sequence at the TagI site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511. The "mutant" probes are used to detect the 12 possible base-pair mutations potentially induced by treatment of cells with the carcinogen ethylnitrosurea. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polymerase chain reaction; PCR; nested primer; mutation; screening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Quantitative determination of DNA sequences - contg. mutationally eliminated restriction site(s), chain reaction using polymerase amplification and elimination of wild-type sequences.
                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Probe to mutant sequence #5 of exon 3 of human c-Ha-ras gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sandy M, Amstad P, Zijlstra J;
                                                                                                                                                                                                                                                                                     0.9%; Score 15; DB 1; Length 19;
100.0%; Pred. No. 6e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                    Sequence 19 BP; 2 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= a
/note= "mutant TaqI site"
                                                                                                                                                                                                              exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 2; Page 9; 16pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                    936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91EP-00108976.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Felleybosc E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                         Best Local Similarity 100.
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                  922 CTGTTCCAGCTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ15415 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BEHW ) BEHRINGWERKE AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ras oncogene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUN-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-MAR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-DEC-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EP461496-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ15415;
                                                                                                                                                                                                                                                                                       Query Match
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Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;

ADA66485 standard; DNA; 20 BP.

ADA66485

(first entry)

20-NOV-2003

ADA66485;

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RNA was extracted from genital lesions, reverse transcribed to produce CDNA and then the CDNA was used as the template for PCR amplification of various ortokines using the primers in AAT38964- AAT39005. To confirm the identity of amplified cDNA, digoxiganin-labelled probes specific for each cytokine (see AAT39006-T39021) were hybridised with Southern blots of amplified sequences. The expression profile for regressing and non-regressing warts was established and compared to cytokine expression carrents in normal cervical tissue. Results showed that interleukin 12 is barely expressed (if at all) in non-regressing warts, but is expression regressing warts. This suggests a central role for IL-12 in wart regression. It has been found that IL-12 can be used (especially as a vaccine adjuvant) for treating papilloma virus-associated lesions such as condyloma acuminata (anogenital warts) caused by human papilloma virus type 6 (HBV-6) and/Or HFV-11 and more generally for treatment of tumours associated with HPV16 and HPV18 infection e.g. anogenital, cutaneous,
                                           ö
                                                                                                                                                                                                                                                                                                                                                  Cytokine; expression profile; genital wart; interleukin 12; IL-12; tumour regression; adjuvant; polymerase chain reaction; PCR; condyloma acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; HPV18; anogenital; cutaneous; laryngeal; oesophageal; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Use of interleukin-12 to treat papilloma virus-associated lesions - esp. as a vaccine adjuvant with papilloma virus antigen for immuno:therapy of
                                           Gaps
                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 15; DB 1; Length 20; 100.0%; Pred. No. 6.3e+02; ive 0; Mismatches 0; Indels
     DB 1; Length 20; 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 9 A; 5 C; 1 G; 5 T; 0 U; 0 Other;
0.9%; Scc...
100.0%; Pred. No. c...
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYCA-) UNIV CAMBRIDGE TECH SERVICES LTD.
                                                                                                                                                                                                                                                                                                                      Interleukin IL-8 hybridisation probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 16; 32pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95GB-00005784.
                                                                                     CTACACCGAGACCTC 984
                                                                                                      CTACACCGAGACCTC 19
                                                                                                                                                                                                              AAT39013 standard; DNA; 20
                                                                                                                                                                                                                                                                                    (first entry)
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             Query Match 0.9°
Best Local Similarity 100.
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scarpini
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     warts or tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9629091-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-MAR-1995;
                                                                                                                                                                                                                                                                                      29-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stanley MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-SEP-1996,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
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                                                                                                                                                                                                                                                                       /noce= "This oligonucleotide has a phosphorothioate backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5' and 3' ends, which are 5 nucleotides in length. Also all cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to antisense oligonucleotides (ADA66459-ADA66609), which inhibit Transforming Growth Factor (TGF) beta-3 expression. The oligonucleotides are useful for inhibiting the expression of TGF-beta3 in cells or tissues, and to treating an animal having a disease condition associated with TGF-beta3, e.g. a hyperproliferative disorder such as cancers of lung, liver, colon, oesophagus, pancreas, breast, skin or haematopoletic, atherosclerosis, rheumatoid arthritis,
                                                                        44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                   Transforming growth factor-beta 3 antisense oligonucleotide, SEQ ID
                                                                                                 Cytostatic; antirheumatic; antiarthritic; gynecological; antiarteriosclerotic; Transforming Growth Factor beta-3; TGF beta-3, hyperproliferative disorder; cancers; atherosclerosis; rheumatoid arthritis; preeclampsia; fibrosis; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15; DB 1; Length 20; Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 3; Page 87; 154pp; English.
                                                                                                                                                                                                                                                              /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Match
Local Similarity 100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                      12-JUL-2002; 2002WO-US022423.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        449 TCTCCACTGAGGACA 463
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                preeclampsia and fibrosis.
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                                                                                                                                                                                                                                            /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-229569/22.
                                                                                                                                                                                                                                                                                                                                                           WO2003008544-A2
                                                                                                                                                                                                                   Key
modified_base
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                                                                                                                                                                                      Synthetic.
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ADA66486
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1068 AAAGACATACTCCAA 1082

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Conservative

15;

Best Loca Matches

Local Similarity

Query Match

2 AAAGACATACTCCAA 16

Spits H;

Ogarra A,

mediated

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Claim 3; Page 87; 154pp; English.
                                                                                                                                                                                                                                                                                 AAQ37151 standard; DNA; 21 BP.
                                                                                                            12-JUL-2002; 2002WO-US022423
                                                                                                                     14-JUL-2001; 2001US-00906158
                                                                                                                                                                                                                                                   449 TCTCCACTGAGGACA 463
                                                                                                                                                                                                                                                        6 TCTCCACTGAGGACA
                                                                                                                                                                                                                                          15; Conservative
                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                   (revised)
                                                                                                                                               WPI; 2003-229569/22.
                                                                                                                                                                                                                                      Local Similarity
                                                                                           WO2003008544-A2
                                                    Key
modified_base
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                                           Synthetic
                                                                                                                                      Monia BP,
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                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                         518
                                                                                                                                                                                                                                          Matches
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Northern and Southern hybridisations were performed to determine the level at which IL-10 and IL-4 inhibit monokine production. The probe AAA03151 was used in Southern analysis of PCR products to detect IL-8 alpha coding sequences. The sequence of the probe corresponds to nucleotides 200-221 of the sequence given in Schmid et al., (1987), J. Immunol. It was found that IL-1 alpha, IL-6, TNF alpha, GM-CSF and G-CSF expression was strongly inhibited by IL-10 and IL-4 at the mRNA level. IL-1 beta and IL-8 expression was only slightly affected by IL-10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Interleukin-10; IL-10; septic shock; bacterial infection; toxic shock; infectious shock; inflammation; immune response modulation; therapy; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                      function - for treating septic and toxic shock, auto-immune diseases tumours and infections diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 15; DB 1; Length 21;
100.0%; Pred. No. 6.6e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                 Use of interleukin-10 to modulate inflammation or T-cell
                                                                                                                                                                                                                                                                     Hsu DH, Ishida H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 9 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Probe IL-8 for Interleukin-10 coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (Updated on 25-MAR-2003 to correct PN field.)
monokine production; Southern analysis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Example B6; Page 85; 208pp; English.
                                                                                                                                                                                                                                                                     De Waal Malefyt R, Howard M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
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92US-00926853.
94US-00229854.
                                                                                                                                                    92WO-US006378
                                                                                                                                                                                           91US-00742129.
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                                                                                                                                                                                                                             SCHE ) SCHERING CORP
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                                                                                                                                                                                                                                                                                                                             WPI; 1993-076172/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3est Local Similarity
                                                                                                                                                    06-AUG-1992;
                                                                                                                                                                                      06-AUG-1991;
                                                                      WO9302693-A2
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                                                                                                              18-FEB-1993
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                                    Synthetic.
                                                                                                                                                                                                                                                                                       Zlotnik A;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel antisense compound which is targeted to nucleic acid encoding transforming growth factor beta-3, and inhibits expression of TGF-beta 3, useful for treating a condition associated with TGF-beta 3, e.g. cancer.
                                                                                                                                                                                                                                                                                                   /note= "This oligonucleotide has a phosphorothioate backbone and 2-"methyoxyethyl (2-MoB) wings at the 5' and 3' ends, which are 5 nucleotides in length. Also all cytidine residues are 5-methylcytidines"
                                                    SEQ ID 45.
                                                                                  Cytostatic; antirheumatic; antiarthritic; gynecological; antiarterioscelerotic; Transforming Growth Factor beta-3; TGF beta-3; hyperproliferative disorder; cancers; arberosclerosis; rheumatoid arthritis; preeclampsia; fibrosis; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                Transforming growth factor-beta 3 antisense oligonucleotide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 15, DB 1; Length 20;
Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Probe to detect interleukin-8 sequences.
                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                   mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
          (first entry)
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Gaps

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DNA encoding antigenic peptide(8) of new types of hepatitis C virus - for diagnosing and treating HCV infection, screening blood samples and identifying different HCV types.
                                                          Example 14; Col 42; 109pp; English
                                                                                                                                                                                                                                                                                                                      HCV type 1 NS-4 sense primer 196.
                                                                                                                                                                                                                                                                                                                                                                                                                                      (COMM-) COMMON SERVICES AGENCY
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yap PL;
                                                                                                                                                                                                                         1068 AAAGACATACTCCAA 1082
                                             administering interleukin-10.
                                                                                                                                                                                                                                      2 AAAGACATACTCCAA 16
                                                                                                                                                                                                                                                                        AAQ43129 standard; DNA; 23
                                                                                                                                                                                                                                                                                                  (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chan S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1993-182554/22
                         WPI; 1999-008644/01
                                                                                                                                                                                                                                                                                                                                                                                                      20-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                   21-NOV-1991;
24-JUN-1992;
                                                                                                                                                                                                                                                                                                                                                                            WO9310239-A2
                                                                                                                                                                                                                                                                                                  25-MAR-2003
23-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Simmonds P,
                                                                                                                                                                                                                                                                                                                                                                                        27-MAY-1993
    Ishida H,
Hsu D;
                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                     AAQ43129;
                                                                                                                                                                                                                                                            RESULT 520
                                                                                                                                                                                                                                                                  AAQ43129/
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The sequences given in AAQ43112-33 are primers which were used to amplify specific regions of the hepatitis C virus (HCV) genome. Analysis of regions of the HCV genome revealed the existance of three distinct groups of HCV. Analysis of the region encompassing -255 to -62 of the 5' non of HCV. Analysis of the region encompassing -255 to -62 of the 5' non of HCV analysis of the region encompassing -255 to of the 5' non nucleotide sequences between the three groups. Two of the groups indicatified were similar to those of HCV varients termed type 1 and 2, willst the third appeared to represent a novel type of virus. Comparison of the NS3 region (see AAR37927-30) showed a high degree of sequence diversity with type 3 being phylo- genetically different to type 1 and 2. The same degree different- lation was noted in the NS-5 (see AAR37931) between type 3 and type 1 sequences. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Single-stranded DNA for identifying gene signatures - isolated from 3'-directed human cDNA library that reflects relative abundance of corresp.mRNA in specific human tissues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gene signature; messenger RNA; mRNA; relative abundance; frequency; human; cloning; mapping; non-biased library; diagnosis; detection; cell typing; abnormal cell function; primer; PCR; amplification; polymerase chain reaction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human gene signature HUMGS01473-derived sense primer.
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 23 BP; 5 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   292 CGTTCTGCACGGGCCCACTCAG 314
                Disclosure; Page 27; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23 CATTCTGAACGCCCCAGTCTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВР
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT41227 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-DEC-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 78.3<sup>1</sup>
*****hes 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matsubara K, Okubo K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1995-206931/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MATS/) MATSUBARA K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (OKUB/) OKUBO K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09514772-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-1995.
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                                                                                                                                                                                                                                                                                                                                                                  PN field.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT41227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT41227
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
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                                                                                                                                                                                                                                               This sequence represents a probe for a interleukin-10 (IL-10) coding sequence. The IL-10 protein can be used in the method of the invention to ameliorating a symptom of: (a) septic shock in a host suffering from a bacterial (preferably gram negative) infection; (b) toxic shock; (c) infectious shock; or (d) inflammation. The method comprises administering a biologically active IL-10 (preferably human) protein, malogue or a fragment (preferably full length). The treatment is used to modulate immune responses caused by the different shock syndromes, which are conditions are side-effects of microbial infections, caused by release of their protein products, especially on anti-microbial treatment, which when calls are killed, they layer releasing proteins which induce the shock conditions. IL-10 inhibits TNR-alpha (tumour necrosis factor-alpha) and TNF-gamma synthesis, which as part of an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Non-coding region; hepatitis C virus; blood donor; type 2; type 1; HCV; NS-5; phylogeny; differentiation; NS-3; core region; type 3; PCR; amplify; polymerase chain reaction; primer; NS4; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                        Treating shock conditions from e.g. bacterial infections - comprises
                     Zlotnik A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
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0.9%; Score 15; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels
                       Howard M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 9 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
                       Spits H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immune response elicits the shock syndromes
                            O'garra A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91GB-00024696.
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                            Malefyt RDW,
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Gaps

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5; Indels

Primers T41001-T41382 are derived from novel human gene signature (GS) sequences which did not match with sequences deposited in Genbank release 76. The GS sequences (T1901-T26837) were obtained from 3'-directed cDNA libraries prepared from various human tissues; synthesis of CDNA was initiated from the 3'-end of mRNA by using poly(T) as the sole primer. Each library is constructed so as to reflect accurately the relative

Example 7; Fig 8; 2245pp; Japanese.

Mu-opioid receptor; MOR-1; splice variant; morphine analgesia; opioid-mediated ingestive response; opioid activity; analgesic; gastrointestinal motility; respiration; immune system; endocrine system; autonomous nervous system; peristalsis regulator; body weight; neuroendocrine disorder; PCR primer; ss.

PCR primer used to amplify mu-opioid receptor splice variant cDNA

(first entry)

16-MAY-2000

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AAZ60724;

BP.

23

DNA;

AAZ60724 standard;

RESULT 523

AAZ60724,

23 TGGAGCAGGTGACCATCTACAGC

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Gene expression cassette, promoter; alcR regulator, insecticide, CryIA(c); CryV; crystal protein; delta-endotoxin; Bacillus thuringinesis; Lepidoptera; insect resistance; transgenic plant; crop protection; biological control; polymerase chain reaction; PCR; primer; ss.
                                                    derived. The appearance frequency of a given GS in a cDNA library can be determined (esp. using primers and probes derived from the GS sequences) as a means of diagnosing abnormal cell function or for recognising different cell types. The primers T41227-8 amplify clone pm2231 which comprises the GS HUMGS001473 (T20473), located on chromosome 22
abundance of different mRNAs in the particular tissue from which it was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR primers (AAT59707-11) were designed to test tobacco (Nicotiana tabacum cv. Samsun) plants for the presence of Bacillus thuringiensisderived Cryv (see also AAT597012) sequences following Agrobacterium-mediated transformation with vectors carrying novel constitutive or inducible gene expression cassettes. (AAT59705)/CRY1A2R (AAT59706) and CRYIA1 (AAT59707)/NOS (AAT59708), constitutive Cryv expression with TMVI/CRYVIR (AAT59709) and CRYVI (AAT59709) and cRYVI (AAT59709) and cRYVI (AAT59709) and inducible Cryla(c) expression with AACRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chemically inducible expression cassette - contains inducible promoter activated by alcR regulator in presence of alcohol or ketone inducer, used for insecticide production in plants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.18+02; tive 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 23 BP; 5 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       396 TGAGGTGCAGTCTCCAGTGAGAG 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 reagcrecacrraccrereagag 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 6; Page 13; 52pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96WO-GB001846.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT59709 standard; DNA; 23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1997-154272/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer CRYV1R
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9706268-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-MAY-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT59709;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 522
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\mathcal{G}_{\mathcal{G}}^{\mathcal{G}} \mathcal{G}_{\mathcal{G}}
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The present PCR primer was used to amplify cDNA encoding a fragment containing exon 1c of a murine mu-opioid receptor (MOR-1) splice variant. The specification describes 11 new exons for the MOR-1 gene, which combine to yield 15 novel splice variants of the MOR-1 gene. These splice variants are potential targets for modulating morphine analgesia and opioid-mediated ingestive responses. The MOR-1 polypeptide is used to screen compounds for opioid activity. Such compounds are potential analgesics or more generally agents that affect gastrointestinal canalgesics or more generally agents that affect gastrointestinal motility, respiration or the immune, endocrine or autonomous nervous of systems, e.g. regulators of peristalsis. Antagonists, agonists and ligands of MOR-1, as well as DNA vectors expressing MOR-1-encoding nucleic acids, or sequences antisense to MOR-1 nucleic acids, are used to regulate morphine analgesia and body weight. The level of MOR-1 or tissue distribution of MOR-1 and measured to diagnose MOR-1 related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pharmacological abnormalities or neuroendocrine disorders, particularly inherited disorders. Transgenic animals with extra copies of the MOR-1 gene, or with endogenous alleles deleted, are used to study loss or gain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New splice variants of the mu-opioid receptor, useful in screening for selective analgesics and for regulating morphine analgesia or body
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 23 BP; 4 A; 3 C; 12 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 7.1e+02;
0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                       (SLOK ) SLOAN KETTERING INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1715 GCCIGAGCCATGTTCACCTGCCC 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 33; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCTTAGCCACTACCACCTGCCC 1
                                                                                                                                                                                                                                                                                                                                                     99WO-US015974,
                                                                                                                                                                                                                                                                                                                                                                                        98US-0092980P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match
Best Local Similarity 78.3
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of function phenotypes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-182402/16.
                                                                                                                                                                                                                                                                              WO200004046-A2.
                                                                                                                                                                                                                                                                                                                                                   15-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                        16-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pasternak G,
                                                                                                                                                                                                                                                                                                                   27-JAN-2000.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   weight.
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δ
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Gaps

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Query Match 0.9%; Score 15; DB 1; Length 23; Best Local Similarity 78.3%; Pred. No. 7.1e+02; Matches 18; Conservative 0; Mismatches 5; Indels

PCR primer 944-966 used in alpha4-integrin polymorphism detection.

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osteopathic; transforming growth factor-beta; TGF-beta; binding protein; BEER; chromosome 17q12-21; gene therapy; antisense therapy; fracture; bone mineralization; primer; beta-actin; ss.
                                                                                                                                                                                                                                                                                                                Nucleic acids (I) encoding a transforming growth factor beta binding protein, useful for identifying agents for treating osteopenia, osteoporosis and fractures.
                                                                                                                                                                                                                                                                 Kovacevich B, Mulligan JT, Paeper BW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
0.9%; Score 15; DB 1; Length 23;
Best Local Similarity 78.3%; Pred. No. 7.1e+02;
Matches 18; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
                                                                        Sense PCR primer for human beta-actin gene.
                                                                                                                                                                                                                                                                                                                                                              Example 2; Page 56; 162pp; English.
           BP.
                                                                                                                                                                                                    99WO-US027990.
                                                                                                                                                                                                                        98US-0110283P.
                                                                                                                                                                                                                                            (DARW-) DARWIN DISCOVERY LTD
           AAA29067 standard; DNA; 23
                                                     (first entry)
                                                                                                                                                                                                                                                                  Galas DJ, 1
Winkler DG;
                                                                                                                                                                                                                                                                                                WPI; 2000-412321/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   low mineral content
                                                                                                                                                           WO200032773-A1.
                                                                                                                                                                                                                                                                 Brunkow ME,
                                                                                                                                        Homo sapiens
                                                                                                                                                                                                    24-NOV-1999;
                                                                                                                                                                                                                        27-NOV-1998;
                                                     12-SEP-2000
                                                                                                                                                                                08-JUN-2000
                                                                                                                                                                                                                                                                            Van Ness J,
                                AAA29067;
AAA29067
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AAA29067-68 are primers for amplification of the human beta-actin gene which was used as a control when amplifying the BEER gene to determine its tissue-specificity. BEER is a human transforming growth factor-beta (TGF-beta) binding protein (BEER). The HBEER gene has been localized to the chromosome 17q12-21. The CDNA and protein may be used for prevention, treatment and diagnosis of diseases associated with inappropriate BEER syression. For example, they may be used to treat disorders associated with decreased TGF-beta BP expression. The CDNA or vectors may be administered to treat diseases by rectifying mutations or deletions in a patient's genome that affect the activity of BEER by expressing inactive proteins or to supplement the patients own production of BEER pertended. The nucleic acids may be used for recombinant production of BEER, gene therapy, antisense therapy, as probes for diagnostic assays and for identification of BEER modulators. BEER may be used to raise antibodies and for increase bone mineral content for the treatment of disorders such as the patients of the increase such as the patients and other disorders associated with
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0
Gaps
..
                                 506 AGGCTACCTGGAGAGCTGACC 528
                                                               1 AGGCCAACCGCGAGAGATGACC 23
                                                                                                                                              AAA13193 standard; DNA; 23
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20-JUL-2000 (first entry)

AAA13193;

AAA13193 ID AAA1 XX XX AC AAA1 XX DT 20-J

RESULT 525

à g

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This sequence represents a PCR primer used in the detection of a single mucleotide polymorphism (SNP) in the human alpha4-integrin promoter nucleotide sequence defined in EMBL 126659. The invention relates to the diagnosis of SNPs in the human alpha4-integrin subunit gene, comprising determining the sequence of the gene in at least one of 5 positions within the coding region and/or 8 positions within the promoter region of the gene. Diagnosis of SNPs in the human alpha4-integrin subunit gene comprises determining the gene sequence in at least one of the following positions: (1) 740, 2273, 2446, 3311 and 3506 in the coding region of EMBL 126509) and/or (3) 184, 238, 331, 436, 676, 1010 or 1115 in the promoter region (EMBL M26641). The method is used to identify subjects of diseases, e.g. autoimmune, allergic and vascular inflammatory diseases concerned and the coding regions and to developing) alpha4-integrin subunit ligand mediated concerned to identify patients who will benefit from treatment with the salso used to identify patients who will benefit from treatment with particular alpha4-integrin subunit likely clinical responses and to determine the therapeutic dose. Nucleic acid sequences that contain at least one polymorphism are used to screen for compounds the trangeutic agents that may target selectively one or more alleles of the therapeutic agents that may target selectively one or more alleles of the therapeutic agents that may target selectively one or more alleles of the readable storage medium containing the polymorphic sequences is useful containing the polymorphic sequences is useful generally those at 2273, 3311 and 1010 which are relatively common, are useful as genetic markers in linkage studies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                             PCR primer; alpha4-integrin; single nucleotide polymorphism; SNP; human; autoimmune disease; allergy; inflammatory disease; multiple sclerosis; rheumatoid arthritis; asthma; genetic marker; detect; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Detecting single nucleotide polymorphisms in the alpha 4-1 integrin subunit gene, useful for diagnosing e.g. autoimmune disease and for screening for ligand antagonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7.le+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 23 BP; 6 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.9%; Score 15; DB 1; 78.3%; Pred. No. 7.1e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60 ACTGCTGAAACCCAGGGGAGGGC 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ACTICTGAACCCAGAGCTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 4; Page 24; 38pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAS04272 standard; DNA; 23 BP.
                                                                                                                                                                                                                                                       99WO-GB003071
                                                                                                                                                                                                                                                                                              98GB-00020339
98GB-00024506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 78.3
Les 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-283615/24.
                                                                                                                                                                                                                                                                                                                                                           (ZENE ) ZENECA LTD.
                                                                                                                                                                              WO200017394-A1.
                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                         15-SEP-1999;
                                                                                                                                                                                                                                                                                                19-SEP-1998;
                                                                                                                                                                                                                                                                                                                     10-NOV-1998;
                                                                                                                                                                                                                    30-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                  Morten JEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAS04272
ID AAS0
XX
à
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The present sequence for human TANGO 298 TagMan probe is used to measure human TANGO 298 gene expression by quantitative PCR. TANGO 298 (AAU02497) is a novel secreted protein isolated from clone jyhmal18f02 from a human bone marzow cDNA library. The gene for TANGO 298 maps to chromosome 19p13.3. TANGO 298 shows sequence homology to human adipsin (complement factor D) and may play a role in the alternative complement pathway and in regulation of systemic energy balance. TANGO 298 may be used to treat haemoglobinnial, obesity, diabetes, blood and haematopoietic associated disorders (e.g. leukaemia), monocyte associated disorders (e.g. impaired phagocytosis) cardiovascular disorders (e.g. unstable angina, atherossis), immune disorders (e.g. arthritis, AIDS), inflammatory consorders (e.g. bacterial infection), disorders associated with abnormal serine protease function (e.g. AIDS), and platelet consorders (e.g. thromosis). Human secreted protein; TANGO 298; chromosome 19p13; probe; bone marrow; nucleic acid molecule encoding type II transmembrane proteins useful complement factor D; alternative complement pathway; complement regulator deficiency; serine protease dysfunction; adipsin; obesity; diabetes; blood and haematopoietic associated disorder; cardiovascular disorder; inflammatory disorder; immune disorder; ss. disorders (e.g. thrombosis). The invention also describes the novel secreted proteins human TANGO 269 (AAU02495) and murine TANGO 269 (6-carboxyfluorescein)" Sequence 23 BP; 6 A; 13 C; 2 G; 2 T; 0 U; 0 Other; for treating immune related disorders /mod_base= OTHER /note= "OTHER=TAMRA" Example 1; Page 103; 137pp; English. Location/Qualifiers /*tag= a /mod_base= OTHER /note= "OTHER=FAM Human TANGO 298 TaqMan probe. 27-OCT-2000; 2000WO-US029797 99US-00417796 17-MAY-2000; 2000US-00572275 (MILL-) MILLENNIUM PHARM INC 07-SEP-2001 (first entry) /*tag= b Fraser CC, Hodge MR; WPI; 2001-300479/31. WO200130831-A1 nodified_base modified base Homo sapiens, 27-OCT-1999; 03-MAY-2001

Example; Col 13; 22pp; English.

0.9%; Score 15; DB 1; Length 23; 100.0%; Pred. No. 7.1e+02; tive 0; Mismatches 0; Indels Query Match 0.9 Best Local Similarity 100. Matches 15; Conservative

1353 CCACGCACCCCGACT 1367

4 CCACGCACCCCGACT 18

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Conducting a bi-directional polymerase chain reaction amplification of specific alleles, involves amplifying DNA containing one or both of two alleles using an outer pair of primers and an inner pair of primers.
                                                                           Factor V; human; FV gene; bi-directional PCR; Bi-PASA; mutation; zygosity; homozygote; heterozygote; genetic screening; diagnosis; venous thromboembolism; PCR primer; ss.
                                                             Human Factor V gene PCR primer A F5(254)-23D
               AAF30591 standard; DNA; 23 BP
                                                                                                                                                                 98US-00150900.
                                                                                                                                                                                97US-0058575P
                                             (first entry)
                                                                                                                                                                                              (CITY ) CITY OF HOPE.
                                                                                                                                                                                                                              WPI; 2001-256850/26
                                                                                                                                                                                                               Liu Q, Sommer SS;
                                                                                                                                 US6207425-B1.
                                                                                                           Homo sapiens.
Synthetic.
                                                                                                                                                                                11-SEP-1997;
                                              11-JUN-2001
                                                                                                                                                                 10-SEP-1998;
                                                                                                                                                 27-MAR-2001.
                               AAF30591;
      AAF3059
RESULT
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The present sequence is that of human Factor V (FV) gene primer A F5(254) -23D, used in bi-directional PCR amplification of specific alleles (Bi-SpSA), used in bi-directional PCR amplification of specific alleles (Bi-SpSA). Its name indicates an A primer for FV (FS), the 5' end beginning at base 254 of the FIX gene exon 10 and proceeding downstream for 23 bases. It also has a 5' G8C2 tail. A mutation (G to A transition) at by thromboembolism. Detection of the mutation in the FV gene was used to thromboembolism. Detection of the mutation in the FV gene was used to primers (A and B) are each specific for different alleles. P is complementary to the antisense strand of both alleles in a region upstream of the sequence difference (mismatch). Q is complementary to the sense strand of both alleles in a region downstream of the complements are contained segment of size PB resulting from the 2nd allele, and a combined segment of size PB resulting from the 2nd allele, and a combined segment of size PD resulting from the 2nd allele, and a combined segment of size PD. In homosygotes, segment PC relative yield of DNA products obtained using the present primer was (B ingh, as indicated by a very strong DNA band on agarose gels. Bi-PASA provides a one-tube method for similarmeously differentiating homozygotes and heterozygotes. It can detect small deletions and insertions as well as single base changes Bi-PASA is also used to perform population. screening, haplotype analysis, patient screening and carrier testing. The method is rapid, reproducible, inexpensive, non-isotopic and amenable to automation

Sequence 23 BP; 2 A; 8 C; 12 G; 1 T; 0 U; 0 Other;

.. 0 0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.1e+02; Live 0; Mismatches 5; Indels Query Match 0.99 Best Local Similarity 78.39 Matches 18; Conservative

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Gaps

242 GCGCCAGTGACCCTGGAGAGGCC 264

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Gaps

· 0

1 GCGGGGGGCCCTGGACAGGCC 23

۳,

Darfler M;

01-AUG-2002.

07-NOV-2002

ABT06518;

RESULT 528

ABT06518

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The invention relates to a composition comprising one or more nucleic acid molecules and at least one oligonucleotide, where at least a portion of the oligonucleotide is capable of hybridising with at least a portion of the nucleic acid molecule and where the oligonucleotide comprises a condition and molecule and where the oligonucleotide comprises a modified nucleotide at or near the 3'-terminal nucleotide. The various condition of more target nucleic acid molecules in a sample during nucleic acid cone or more target nucleic acid molecules in a sample during nucleic acid synthesis or amplification. The analogues are also useful for determining the presence or absence of one or more particular nucleotides at a specific position or positions in a target nucleic acid molecule. The capablifying one or more nucleic acid molecules, by mixing one or more nucleic acid molecules, by mixing one or more nucleic acid molecules, by mixing one or more nucleic acid incubating the mixture to synthesise or amplify one or more nucleic acid incubating the mixture to synthesise or amplify one or more nucleic acid incubating the mixture to synthesise or amplify one or more nucleic acid incubating the mixture to synthesise or amplify one or more nucleic acid incubating the mixture to synthesise or amplify one or more nucleic acid incubating the mixture to synthesise or amplify one or more nucleic acid discrimination related oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Composition comprising nucleic acid molecules and a oligonucleotide capable of hybridizing with a portion of nucleic acid, and comprises a modified nucleotide at or near the 3'-terminal nucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Beta-actin; bone morphogenic protein; human; glaucoma; diagnosis; therapy; ophthalmological; PCR; primer; 88.
                                           Nucleic acid detection and discrimination related oligo SEQ ID No
                                                                                              Hybridising; quantification; detection; synthesis; amplification;
oligonucleotide; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match 0.9%; Score 15; DB 1; Length 23; Local Similarity 78.3%; Pred. No. 7.1e+02; les 18; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 23 BP; 7 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Solus J, Pires RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             945 GGCCTACTGCCACGGCAGAAGG 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 115; 307pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTCTACAGCCACCATGAGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beta-actin upstream PCR primer.
                                                                                                                                                                                                                                                                                                                                                        27-DEC-2001; 2001WO-US050460.
                                                                                                                                                                                                                                                                                                                                                                                                              27-DEC-2000; 2000US-00748146.
23-OCT-2001; 2001US-0330468P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rashtchian A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACF05961 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
07-NOV-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (INVI-) INVITROGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Astatke M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-627370/67.
                                                                                                                                                                                                                                                   WO200257479-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nazarenko I,
                                                                                                                                                                                                Unidentified.
                                                                                                                                                                                                                                                                                                       25-JUL-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gebeyehu G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACF05961;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACF05961
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to a method of diagnosing a cellular proliferative disorder of breast tissue, which involves determining the state of methylation of one or more nucleic acids isolated from the state of methylation from a will be a state of methylation of the nucleic acids as compared with a state of methylation from a subject, where the state of methylation from a subject not having the cellular proliferative disorder of breast tissue is indicative of a cellular proliferative disorder of breast tissue in the subject. The nucleic acids may be TWAST, HOXAS, NES-1, retinoic acid receptor beta (RARbeta), costrogen receptor, cyclin D2, Wilms' tumour gene (WT-1), 13.3 sigma, HN-10 r RASSF1A. The method is useful for diagnosing and/or determining a predisposition to a cellular proliferative disorder, in particular breast cancer including ductal carcinoma in situ, lobular carcinoma, colloid carcinoma, tubular carcinoma, medullary carcinoma, metaplastic carcinoma, intraductal carcinoma mistu, lobular carcinoma in situ and cancinoma in situ. The present sequence is a primer used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Diagnosing and/or determining a predisposition to a cellular proliferative disorder of breast tissue, in particular breast cancer, by determining the state of methylation of one or more nucleic acids
                                                                                                                                                                                                                                                                                   Human, methylated gene; methylation; breast cancer; marker; WT-1;
cell proliferative disorder; TMIST; HOXA5; NES-1; RARbeta; cyclin D2;
retinoic acid receptor beta; oestrogen receptor; Wilms' tumour;
14.3.3 sigma; HIN-1; RASSF1A; tumour suppressor gene; hypermethylation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sacchi N, Davidson N, Fackler MJ;
                                                                                                                                                                                                                               Retinoic acid receptor beta promoter methylation specific primer #4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
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0.9%; Score 15; DB 1; Length 23;
Best Local Similarity 78.3%; Pred. No. 7.1e+02;
Matches 18; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 23 BP; 8 A; 6 C; 0 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1681 AACTACATCTTCCCTGCTTACTC 1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATTACATTTTCCAAACTTACTC 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Fig 3B; 115pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dooley WC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABT06660 standard; DNA; 23 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-JAN-2002; 2002WO-US002455.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-JAN-2001; 2001US-00771357.
                                                                       ABT06518 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        isolated from the subject.
                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sukumar S, Evron E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-599803/64
                                                                                                                                                                                                                                                                                                                                                                                                              PCR; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200259347-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unidentified
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ö

Gaps

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23

ABT06660;

A X X X

RESULT 529

ð d ABT06660

Uhal BD;

Homo sapiens.

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The invention relates to a method for treating pulmonary fibrosis
involving administering to a subject at risk of or suffering from
bulmonary fibrosis, an amount of an antagonist of a renin-angiotensin-
aldosterone system e.g., a caspase enzyme inhibitor or an endonuclease
inhibitor that inhibits pulmonary epithelial cell apoptosis, where the
attagonist is a non-thiol angiotensin activating enzyme (ACE) inhibitor.

The method is useful for treating a subject suffering from pulmonary
fibrosis such as idiopathic pulmonary fibrosis, sarcoidosis, familial
carbon pneumoconiosis, hypersensitivity pneumonitides, pulmonary fibrosis
carbon pneumoconiosis, hypersensitivity pneumonitides, pulmonary fibrosis
caused by inhalation of inorganic dust, pulmonary fibrosis caused by an
infectious agent, pulmonary fibrosis caused by inhalation of noxious
caused by inhalation of inorganic dust, pulmonary fibrosis caused by intreating a
interstitial lung disease (ILD). The method is also useful in treating a
cubject at risk of pulmonary fibrosis and undergoing radiation therapy or
chemotherapy and in treating pulmonary fibrosis associated with collagen-
casculated alsorders or vasculitides, histiocytosis X, Goodpasture's
syndrome, chronic essinophilic pneumonia, idiopathic pulmonary
chaemosiderosis or arrhythmia. This sequence represents a reverse
transcriptase PCR (RT-PCR) primer used in the method of the invention.
                                                                                       Treating pulmonary fibrosis by administering antagonist of reninangiotensin-aldosterone system e.g. non-thiol angiotensin activating enzyme inhibitor, caspase enzyme or endonuclease inhibitor that inhibits apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cellular proliferative disorder; breast cancer; methylation; predisposition; PCR; primer; CpG island; ss; human; retinoic acid receptor beta 2; RAR beta2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human retinoic acid receptor beta 2 (RAR beta2) primer #18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                        Example 5; SEQ ID NO 17; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                506 AGGCTACCTGGAGAAGCTGACC 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AGGCCAACCGCGAGAAGATGACC 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADM83762 standard; DNA; 23 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-JAN-2002; 2002US-00059579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-JAN-2001; 2001US-00771357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18; Conservative
                                                                WPI; 2003-810878/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EVRON E.
DOOLEY W C.
SACCHI N.
DAVIDSON N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUKUMAR S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003138783-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-JUL-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (EVRO/)
(DOOL/)
(SACC/)
(DAVI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SUKU/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADM83762
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0
                                                                                                                                                                                                                                                                                                                                                                             Diagnosing glaucoma in a sample comprises detecting altered expression of bone morphogenic proteins in sample from a cell or bodily fluid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence is an upstream primer for the PCR amplification of the human beta-actin gene. RT-PCR was used to examine the expression of bone morphogenic protein (BMP) family genes in human trabecular meshwork and optic nerve head tissues. The invention provides methods for diagnosing glaucoma based on altered expression of BMPs. Also provided are methods for treating glaucoma and for identifying agents suitable for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              caspase enzyme inhibitor; endonuclease inhibitor;
pulmonary epithelial cell apoptosis;
pulmonary epithelial cell apoptosis;
non-thiol angiotensin activating enzyme inhibitor;
non-thiol ACE inhibitor; sarcoidosis; silicosis; asbestosis;
pneumoconiosis; hypersensitivity pneumonitides;
drug-induced interstitial lung disease; ILD; vasculitides;
histocytosis X; Goodpasture's syndrome; chronic eosinophilic pneumonia;
arrhythmia; RT-PCR; primer; ss; reverse transcriptase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.1e+02; Live 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; pulmonary fibrosis; renin-angiotensin-aldosterone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                (ALCO-) ALCON INC.
(UNNT-) UNIV NORTH TEXAS HEALTH SCI CENT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 506 AGGGCTACCTGGAGAAGCTGACC 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AGGCCAACCGCGAGAAGATGACC 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 25; 55pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADD41388 standard; DNA; 23 BP
                                                                                                                         31-OCT-2002; 2002WO-US035251.
                                                                                                                                                                      31-OCT-2001; 2001US-0334852P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0164052P.
2000US-00708742.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36-JAN-2003; 2003US-00337169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human DNA RT-PCR primer #11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18; Conservative
                                                                                                                                                                                                                                                                                   Clark AF, Wordinger RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             treatment of glaucoma
                                                                                                                                                                                                                                                                                                                                WPI; 2003-559253/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В D.
                              WO2003055443-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003113330-A1
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08-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UHAL/) UHAL
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                                                                           10-JUL-2003
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RESULT 531

ADD41388

Matches

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Gaps .; 0

Length 23; Indels

EVRON E. DOOLEY W C. SACCHI N. SUKUMAR S. JS2003138783-A1 Homo sapiens 03-JUN-2004 24-JUL-2003. ADM83742; (SACC/) (DAVI/) (FACK/) Query Match (SUKU/) (EVRO/) DOOL/) Matches RESULT 53 ADM83742 g ð

21-MAY-2004. 18; ADP10659; Matches RESULT 534 ADP10659/c g ò The invention describes a method of diagnosing a cellular proliferative disorder of breast tissue in a subject comprising determining the state of methylation of one or more nucleic acid isolated from the subject, where the state of methylation of one or more nucleic acids is compared with the state of methylation of one or more nucleic acids is compared with the state of methylation of one or more nucleic acids from a subject on thaving the cellular proliferative disorder of breast tissue. Also described are: a method for determining a predisposition to a cellular proliferative disorder of breast tissue in a subject; an method of diagnosing a cellular proliferative disorder of breast tissue in a subject. The method is useful for diagnosing a cellular proliferative disorder of breast tissue in a subject. This sequence represents a primer used in the analysis of the methylation state of the retinoic acid receptor beta 2 (RAR beta2) gene CpG islands ö Diagnosing a cellular proliferative disorder of breast tissue in a subject comprises determining the state of methylation of one or more nucleic acid isolated from the subject. Fackler MJ; Gaps 0 cellular proliferative disorder; breast cancer; methylation; predisposition; PCR; primer; CpG island; ss; human; twist. Davidson N, 0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.18+02; ve 0; Mismatches 5; Indels Sequence 23 BP; 8 A; 6 C; 0 G; 9 T; 0 U; 0 Other; Sacchi N, Disclosure; SEQ ID NO 154; 59pp; English. 1681 AACTACATCTTCCCTGCTTACTC 1703 1 AATTACATTTTCCAAACTTACTC 23 Dooley WC, ADM83742 standard; DNA; 23 BP. 28-JAN-2002; 2002US-00059579. 26-JAN-2001; 2001US-00771357. 78.3%; (first entry) 18; Conservative Human twist primer #6 Sukumar S, Evron E, WPI; 2003-851722/79. (FACK/) FACKLER M J. Best Local Similarity

Fackler MJ;

Davidson N,

Sacchi N,

Dooley WC,

Sukumar S, Evron E,

WPI; 2003-851722/79

FACKLER M J

DAVIDSON N.

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The invention describes a method of diagnosing a cellular proliferative disorder of breast tissue in a subject comprising determining the state of methylation of one or more nucleic acid isolated from the subject, where the state of methylation of one or more nucleic acids is compared with the state of methylation of one or more nucleic acids is compared with the state of methylation of one or more nucleic acids is compared with the state of methylation of one or more nucleic acids is compared to having the cellular proliferative disorder of breast tissue. Also described are: a method for determining a predisposition to a cellular proliferative disorder of breast tissue in a subject; an ethod of diagnosing a cellular proliferative disorder of breast tissue in a subject. The method is useful for diagnosing a cellular proliferative disorder of breast tissue in a subject. The method is useful for diagnosing a cellular proliferative disorder of breast tissue in a subject. This sequence represents a primer used in the analysis of the methylation state of the twist gene CpG silands in normal mammary epithelium, breast cancer cell lines and in primary mammary tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, panoreas, panoreatic islet, lung, bone marrow or stem cell transplant rejection, in an individual, comprises detecting the expression level of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transplant rejection; immune system; rheumatoid arthritis; lupus; inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
subject comprises determining the state of methylation of one or more nucleic acid isolated from the subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to diagnosing or monitoring transplant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Morris M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.1e+02; trive 0; Mismatches 5; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 23 BP; 8 A; 6 C; 0 G; 9 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Set 1 left PCR primer for marker probe #4.
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                                                                                                                                                                                                         Claim 36; SEQ ID NO 134; 59pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1681 AACTACATCTTCCCTGCTTACTC 1703
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20-DEC-2002; 2002US-00325899.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-AUG-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-400724/37.
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Best Local Similarity
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rejection, e.g. cardiac or kidney transplant rejection, in an individual comprises detecting the expression level of one or more genes. The methods, system and kits are useful in diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic islet, lung, bone marrow or stem cell transplant rejection, kenotransplant rejection or mechanical organ replacement rejection, in an individual. The method is also useful in assessing the immune status of an individual. The methods are also useful in diagnosing and monitoring diseases that involve the immune system, e.g. rheumatoid arthritis, lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or viral, bacterial or fungal infection. The present sequence represents a primer for a 50 mer oligonucleotide marker for diagnosis and monitoring of allograft rejection and other disorders.
                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinases other than cell-cycle dependent kinases CNI, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                   Score 15; DB 1; Length 23;
Pred. No. 7.1e+02;
0: Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cdc 2 kinase hammerhead ribozyme recognitoin site #113.
                                                                                                                                                                                                                                                                  Sequence 23 BP; 7 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 18 BP; 1 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Robbins JM
                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                 1390 CTCACCAAGCTGTTGCAGTTTGA 1412
                                                                                                                                                                                                                                                                                                                                                                                                                    23 CTGACCAAGATGTTGATGTTGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 21; 109pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US028772.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0110954P.
                                                                                                                                                                                                                                                                                                       ch 0.9%;
1 Similarity 78.3%;
18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA86682 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IMMU-) IMMUSOL INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-412314/35.
                                                                                                                                                                                                                                                                                                                            Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-DEC-2000
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                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
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                                                                                                                                                                                                           Ribozyme, hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinases other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.8; DB 1; Length 18; 88.9%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                  Cdc 2 kinase hammerhead ribozyme recognitoin site #111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cdc 2 kinase hammerhead ribozyme recognitoin site #112.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18 BP; 1 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 21; 109pp; English
1030 GCTGACTTTGGCCTGGCC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1028 TGGCTGACTTTGGCCTGG 1045
                                                                                                                                                                                                                                                                                                                                                                                                               Barber JR,
                          1 GCTGATTTTGGCCTTGCC 18
                                                                                                 BP.
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                                                                                              AAA86680 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA86681 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             Tritz R, Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                   (IMMI-) IMMISOF INC
                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-412314/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                    WO200032765-A2.
                                                                                                                                                      04-DEC-2000
                                                                                                                                                                                                                                                                                                                            06-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                       04-DEC-1998;
                                                                                                                                                                                                                                                                                                08-JUN-2000
                                                                                                                           AAA86680;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 537
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Gaps

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Score 14.8; DB 1; Length 18; Pred. No. 6.2e+02; 0; Mismatches 2; Indels

ch 0.8%; l Similarity 88.9%; 16; Conservative 0

Best Local Similarity Matches 16; Conserv

Query Match

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Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                            Chumakov I;
                                                                                                          Example 1; Page 21; 109pp; English.
                                                                                                                                                                                                           GGCTGACTTTGGCCTGGC 1046
                                                                                                                                                                                                                      eccreárriricecerree 18
                                                                                                                                                                                                                                                                                                                                                                     99WO-IB000822.
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98US-0109732P.
                                                                                                                                                                                    0.8%;
                          99WO-US028772
                                      98US-0110954P
                                                                                                                                                                                                                                                   AAZ77171 standard; DNA; 18
                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-013267/01
                                                             Tritz R, Welch PJ,
                                                                        WPI; 2000-412314/35
                                                  (IMMI-) IMMISOL INC
                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                 (GEST ) GENSET
    WO200032765-A2
                                                                                                                                                                                                                                                                                                                        diagnosis; ss
                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                               W09954500-A2
                                                                                                                                                                                                                                                                                                                                                                     21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                21-APR-1998;
23-NOV-1998;
                                       04-DEC-1998;
                                                                                                                                                                                                                                                                          10-SEP-2001
                                                                                                                                                                                                16;
                08-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                              Cohen D,
                                                                                                                                                                                                                                                               AAZ77171;
                                                                                                                                                                                                                                        RESULT 538
                                                                                                                                                                                                Matches
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AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification represents a primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacions responses to and side effects from the SEC ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3867, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
           Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.8; DB 1; Length 18; 88.9%; Pred. No. 6.2e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 6 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                 Claim 9; Page 2688; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1679 CCAACTACATCTTCCCTG 1696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sickle cell retinopathy; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAH61848 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                         map of the human genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (IMMU-) IMMUSOL INC.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                               present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-MAY-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAH61848;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAH61848
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CBK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human biallelic marker downstream amplification primer SEQ ID NO:11527.
                                                                                                                                                                                                                                                                                                                                      restenosis, cleaves
                                                                                                                                                                                                                                                                                                                                 New hairpin and hammerhead ribozyme for inhibiting restenosis, cleave RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human genome, biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
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                                                                                                                                                                                                                                                    Robbins JM;
                                                                                                                                                                                                                                                    Barber JR,
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Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix

Robbins JM, Tritz R; WPI; 2001-300427/31.

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Gaps

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ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipaoriatic, dermatological, cytostatic, antisebornheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH$57877 to AAH$62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, ribozyme therapy, hairpin ribozyme, hammerhead ribozyme, recognition site, target, ribozyme binding site; eye disease; vulnerary, proliferative disease, skin disease, psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase, cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatiis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                 invention describes a method for treating a proliferative disease and scarring. The method involves administering a
metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4271.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.8; DB 1; Length 18; 88.9%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18 BP; 1 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                        Disclosure; Page 385; 408pp; English,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1030 GCTGACTTTGGCCTGGCC 1047
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sickle cell retinopathy; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16; Conservative
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                                                                                                    skin or eye
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Gaps

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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozywe (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproleinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin gisases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keindell contracting and hypertrophic or hypertrophic burn
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Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                scar. Adhi5757. to AAH52099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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Pred. No. 6.2e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          exemplification of the present invention
                                                                           Disclosure; Page 385; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1029 GGCTGACTTTGGCCTGGC 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH61846 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%;
88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-OCT-2000; 2000WO-US029500.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGCTGATTTTGGCCTTGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 88.9°
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tritz R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200130362-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH61846;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human;
cyclin
                                                                                                                                                                                                                                                                                                                                  RESULT 543
                                                                                                                                                                                                                                                                                                                                              ACA60586,
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                                                                                                                riboxyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, chermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, cophthalmological, vulnerary, keraclytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin gisases such as psoriasis, atopic dermatitis, actinic keracosis, squamous or basal cell carcinoma and viral or seborheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreorietinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
                                                                                                                                                                                                                                                                                                                                                                                  ö
                        Treating proliferative skin or eye diseases and scarring, using ribozymes
                                                                                            The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a
                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                   that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     therapy; vaccine; rheumatoid arthritis; gene modulation; PCR;
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                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.8; DB 1; Length 18; 88.9%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                     scarring such as keloid, adhesion and hypertrophic or hype
scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human guanylate binding protein reverse primer #SEQ ID 14.
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                                                                                                                                                                                                                                                                                                                                    Seguence 18 BP; 1 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                              exemplification of the present invention
                                                                       Disclosure; Page 385; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                          1028 IGGCIGACTITGGCCIGG 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bowen M,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                               TGGCTGATTTTGGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADE34621 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                   16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CARMAN J.
NADLER S G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-513754/48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BOWEN M.
NEUBAUER M.
 WPI; 2001-300427/31
                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADE34621;
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                                                                                                                                                                                                                                                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     542
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to 50
cells or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention describes a compound (1) of up to 50 nucleobases in length, which inhibits the expression of Cyclin D2. (1) is useful for inhibiting the expression of Cyclin D2 in cells or tissues in vitro. (1) is thus useful for treating disease associated with Cyclin D2 expression. (1) is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This sequence represents human cyclin D2 inhibition associated oligonucleotide
                                                                                                                                                                                                                                                 The invention relates to an assay for identifying a compound that modulates the activity of a gene or protein associated with rheumatoid arthritis. The method of the invention comprises providing a cell expressing a gene or protein associated with rheumatoid arthritis, contacting the cell with a test compound, and determining whether the test compound modulates the activity of the gene or protein. The method of the invention is useful for preparing a composition for treating rheumatoid arthritis. The current sequence represents a PCR primer used in the isolation of rheumatoid arthritis associated genes.
                                          arthritis-associated gene or protein by determining whether the test compound modulates the activity of the gene or protein expressed in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antisense inhibition of human cyclin D2 related oligonucleotide #23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cyclin D2 expression, comprises an oligonucleotide comprising up nucleobases in length, which inhibits expression of Cyclin D2 in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel antisense compound useful for treating diseases associated
Identifying a compound that modulates the activity of rheumatoid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.8; DB 1; Length 18; ilarity 88.9%; Pred. No. 6.2e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cyclin D2; diagnostic; therapeutic; prophylaxis; 2 inhibition; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18 BP; 5 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; Col 45-46; 40pp; English.
                                                                                                                                                                                            Disclosure; Page 24; 170pp; English
                                                                                                                   cell contacted with the compound.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1207 TITCCGGCTCCACGGTG 1224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-361492/34.
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Best Local Similarity
Matches 16; Conserv
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Human LIPIN3 exon1 PCR primer seqid 16.

01-JUL-2004 (first entry)

BP.

ADO17024 standard; DNA; 18

RESULT 545 AD017024/c AD017024;

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                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; cardiovascular associated gene; allelic variation; atherosclerosis; ischemia; reperfusion; hypertension; restenosis; arterial inflammation; myocardial infarction; stroke; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated polynucleotides comprising single nucleotide polymorphisms of the cardiovascular gene, useful for assessing predisposition or susceptibility to a cardiovascular disease, e.g. atherosclerosis, restenosis or stroke.
                                      Gaps
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/ Match 0.8%; Score 14.8; DB 1; Length 18; Local Similarity 88.9%; Pred. No. 6.2e+02; les 16; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                SNP-containing cardiovascular associated gene primer #328.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 81; 187pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kallabis H;
                                                                      992 AGAACCTGCTCATCAACG 1009
                                                                                                         18 AGAACCTGCTCACCATCG 1
                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-JAN-2003; 2003WO-EP000060.
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                                                                                                                                                                                                                                                                            (first entry)
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nes 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (FARB ) BAYER AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003057911-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                          03-JUN-2004
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Query Match
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                   Best Loca
Matches
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Matches
                                                                                                                                                                RESULT 544
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1258 GGAACCCCAACTGAGGAG 1275

GGAAGGCCAACTGAGGAG 18

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The invention describes an isolated polypeptide (I) comprising a caids as given in the specification or a region consisting of 5 or more caids as given in the specification or a region consisting of 5 or more contiguous amino acids, where the region includes amino acid of 634 of (S1). Also described are: an isolated polynuclectide (II) comprising a fully defined sequence (S2) of 2405 base pair as given in the specification, or its complement, a polynuclectide (II) comprising a complement, a polynuclectide that selectively bybridizes to (S2) relative to a known polynuclectide, or a region of 15 or more contiguous nuclectides, the region comprising nucleotide 1904 of (S2); vector, preferably an expression vector (III) comprising (II); a comprising (II); detecting (MI) differential expression of a LIPIN3 polynuclectide in a test sample; detecting obesity or obesity or obesity or a region of (V) or (VI), where the region is 10 or more celated disorders associated with differential expression of (V), or a region of (V) or (VI), where the region is 10 or more certicates in length; soreening (M2) for agents that reduce the cexpression of a LIPIN3 polynuclectides in length; soreening (M2) for agents that reduce the cexpression of a (II) in a test cell sample; antibodies that specifically, bind to (I); a recombinant cell comprising a recombinantly modified (II); and a test cell sample; antibodies that specifically, such that the (II) is overexpressed; a composition comprising two or more (II); and dentifying an alteration in a test cell sample; antibodies that specifically is useful for detecting (I) in a desity related disorder. (II) is useful for detecting (II) in a desity or an obesity related with obesity or in obesity related disorder which involves detecting (II) in (M2), the cell is an adipocyte or such that involves detecting (II) in (M2), the cell is an adipocyte or and any or an order of a primer used to identify and sincle or a primer used to identify or a column of the single or an order or an order or an or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
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                                                                                                                                           LIPIN3; obesity; obesity-related disorder; differential expression; polynucleotide polymorphism; adipocyte; human; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel isolated LIPIN3 polypeptide, useful for diagnosing diabetes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 4 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 5; SEQ ID NO 15; 58pp; English.
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                                                                                                                                                                                                                                                                                                                                                                 26-JUL-2002; 2002US-00206618.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (WARD/) WARDEN C H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                US2004018497-A1.
                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                   29-JAN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Warden CH;
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cleaves

RESULT 546

AAA82999

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The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinases conter than cell-cycle dependent kinases CDKI, PCNA and CYClin B1.
Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                  New hairpin and hammerhead ribozyme for inhibiting restenosis, cleave RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.8; DB 1; Length 19;
Pred. No. 6.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Robbins JM;
                                                                                                     Robbins JM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cyclin D1 ribozyme binding site #33.
                                                                                                                                                                                                                                             Disclosure; Page 49; 109pp; English
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                                                                                                       Barber JR,
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99WO-US028772
                                  98US-0110954P.
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Best Local Similarity
--hes 16; Conserv
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                                                                                                       Welch PJ,
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                                                                                                                                         WPI; 2000-412314/35
                                                                    (IMMG-) IMMGSOL INC
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06-DEC-1999;
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                                                                                                       Pritz R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tritz R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 548
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1. PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA86745. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                               SS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cleaves
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New hairpin and hammerhead ribozyme for inhibiting restenosis, cleave: RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                             Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis;
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Pred. No. 6.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Robbins JM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1030 GCTGACTTTGGCCTGGCC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                           Barber JR,
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                                                                                                                                                           cdk6 ribozyme binding site #59
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                                                      AAA82999 standard; DNA; 19 BP.
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88.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Welch PJ,
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Best Local Similarity
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RESULT 547

AAA82613 XX XX AC AA. AC AA. XX XX XX XX XX XX XX XX YX PN W PN W YX YX

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                 'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytchine involved in inflammation, matrix metalloproteanse (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (1) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytckine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,
Representative examples of ribozyme recognition sites are given in AAA8615 to AA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient
                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                           0;
                                                                                                                                                        Match 0.8%; Score 14.8; DB 1; Length 19; Local Similarity 88.9%; Pred. No. 6.5e+02; Local 16; Conservative 0; Mismatches 2: Indels
                                                                                                                          G; 4 T; 0 U; 0 Other,
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                                                                                                                                                                                                                                               272 GTGCTGCTCCTGGGGAAC 289
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                                                                                                                        Sequence 19 BP; 3 A; 5 C; 7
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                                                                                  restenosis treatment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretimopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a method for treating a proliferative skin or eye dieease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used
                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                        Score 14.8; DB 1; Length 19;
Pred. No. 6.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                    Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                          exemplification of the present invention
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                                                                                                                                                                                                                                                                                        1030 GCTGACTTTGGCCTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sickle cell retinopathy; ss
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                                                                                                                                                                                                                           Local Similarity 88.9 es 16; Conservative
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                                                                                                                                                                                                          Query Match
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ADF31689
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                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human, ribozyme therapy, hairpin ribozyme, hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; portiasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MWP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antisebornheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; besal cell carcinoma; sebornheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
and (II) are useful for treating proliferative skin
            diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, virteoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scarr, AMH57577 to AMH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [1] which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding [1]. (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:205
                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                         Score 14.8; DB 1; Length 19;
Pred. No. 6.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                            Seguence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                 exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 86; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                           272 GTGCTGCTCGGGGAAC 289
                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGCTGCTCCTGGTGAAC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAH57781 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                         0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                            16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tritz R;
     therapy. (I)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-300427/31.
                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W0200130362-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-MAY-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH57781;
                                                                                                                                                                                                                                                                                                                                            Matches
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AAH5778

AAH57781

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ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or sebornheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to short interfering nucleic acids (siNA) which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pharmacogenomics, gene function analysis, gene mapping; cancer; proliferative disease; restenosis, polycystic kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.8; DB 1; Length 19;
88.9%; Pred. No. 6.5e+02;
ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Inflammatory disease; allergic disease; autoimmune disease; transplant rejection, oytostatic; vasotropic; nephrotropic; antiinflammatory; antiallergic; immunosuppressive; human; insulin-like growth factor I receptor; IGF-1R; ss.
                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human IGF-1R sinA lower strand, SEQ ID NO:354.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           short interfering nucleic acid, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 3; SEQ ID NO 354; 147pp; English.
                                                                                                                                                                                                                                                                                                                                         exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chowrira B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 927 CCAGCTGCTCCGTGGCCT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccadcriccrccaddccr 18
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2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88.98;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADF31689 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.8
Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  factor-1 receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-721691/68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diagnosis of cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003070911-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
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05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JAN-2003;
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10017621-381.rng

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further comprise ensure and antisense regions, or alternatively are assembled from a sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the sinks include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain and contain an engage and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA, conjugates and/or complexes of siNA, and vectors that express siNA. The siNAs are used to modulate expression of the IGF-IR gene in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the cancer and other proliferative disease (e.g., restement of a variety of conditions. They may be used for treating cancer and other proliferative diseases (e.g., restement for a variety and/or allergic diseases, autoimmuno diseases, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence con the lower strand of a human IGF-IR-targeted double-stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human IGF-1R transcript target sequence/siNA upper strand, SEQ ID NO:77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
downregulate expression of the human insulin-like growth factor 1 receptor (IGF-1R) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; mirnA; short hairpin RNA; shRNA; expression modulation; gene therapy; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; cancer; proliferative disease; trestenosis; polycystic kidney disease; inflammatory disease; allergic disease; autoimmune disease; transplant rejection; cytostatic; vasotropic; nephrotropic; antiinflammatory; antiallergic; immunosuppressive; human; insulin-like growth factor 1 receptor; IGF-IR; target sequence; ss.
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Pred. No. 6.5e+02;
6; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19 BP; 5 A; 5 C; 2 G; 0 T; 7 U; 0 Other;
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06-JUN-2002; 2002US-0386782P.
29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0409378P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.8%;
Best Local Similarity 55.6%;
Matches 10; Conservative
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Can be unmodalited or comencally mountated, can context.

Can be unmodalited or comencally mountated, can context.

Cat be unmodalited or can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits

Cor the in vitro or in vivo deal very of sinA, conjugates and/or complexes

of sinA, and vectors that express sinA. The sinAs are used to modulate

expression of the IGF-IR gene in cells, tissue explants or organisms

(e.g., by ex vivo gene therapy), or in grafts and transplants for the

treatment of a variety of conditions. They may be used for treating

cancer and other proliferative diseases (e.g., restenosis and polycystic

kidney disease), inflammatory and/or allergic diseases, autoimmune

diseases and transplant rejection. The sinAs are also useful for drug

screening, diagnosis, therapeutic target identification and validation,

can apping (e.g., of single nucleotide polymorphisms). The present sequence

represents the upper strand of a human IGF-IR-targeted double-stranded

siNA, which is identical to the IGF-IR transcript target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                     New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer , downregulates expression of the insulin-like growth
                                                                                                                                                                                                                             The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human insulin-like growth factor 1 receptor (IGF-IR) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are sssembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), doublestranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          short interfering nucleic acid; siNA; breakpoint cluster region; vabl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2; v-ets erythroblastosis virus E26 oncogene like (avian).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.8; DB 1; Length 19;
88.9%; Pred. No. 6.5e+02;
cive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19 BP; 7 A; 2 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human ERG2-targeted siRNA - SEQ ID 1309.
                                                                                                                                                                                         Example 3; SEQ ID NO 77; 147pp; English.
                    Chowrira
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1681 AACTACATCTTCCCTGCT 1698
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11-MAR-2002; 2002US-0363124P.
06-JUN-2002; 2002US-0386782P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 AAGTACATTTTCCCTGCT
                    Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADF85015 standard; RNA; 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
                                                                                                                                                  factor-1 receptor gene.
                                                          WPI; 2003-721691/68.
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                    Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
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WO2004047514-A2
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                             Mcswiggen J,
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                                                                                                                                                                                                                                                                                                                                                                                                            26-AUG-2004
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                                                                                                                                                                                                                                                                                                 556
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   subject.
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                                                                                                                             New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2; v-ets erythroblastosis virus E26 oncogene like (avian).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interfering nucleic acid; siNA; breakpoint cluster region;
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Pred. No. 6.5e+02;
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                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                      Example 7; SEQ ID NO 1309; 197pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human ERG2-targeted siRNA - SEQ ID 1485.
                                                                                         Chowrira B;
                                                                                                                                                                                                                                                                                targeted siRNA of the invention.
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2002US-0408378P.
2002US-0409293P.
2003US-0439922P.
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2002US-0386782P.
2002US-0404039P.
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                   2002US-0408378P.
2002US-0409293P.
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                                       2003US-0439922P
2003US-0440129P
 2002US-0404039P
2002US-0406784P
                                                                                                                                                                                                                                                                                                                                                             556 CTCAGCCGCCGCCTCCGT
                                                                                         Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                  ADF85191 standard; RNA; 19
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                                                                      (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                             WPI; 2003-679889/64.
                                                                                                                                                                                                                                                                                                                                Similarity
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09-SEP-2002; 2
14-JAN-2003; 2
15-JAN-2003; 2
15-AUG-2002;
29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
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                                                                                          Mcswiggen J,
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                                                  15-JAN-2003;
                                        14-JAN-2003;
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Best Local S
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v-abl
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The invention relates to a novel double-stranded short interfering nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human ERG2 (yets expliciblastosis virus E26 oncogene like (avian))-
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                                                                                                                                                                                               New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kammerer SM, Reneland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 3 A; 5 C; 10 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                      Example 7; SEQ ID NO 1485; 197pp; English.
                                                                  B
                                                                     Chowrira
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             targeted siRNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCAGCCGCCGCCTCCGT 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Braun A,
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24-JUL-2003; 2003US-0490234P.
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                                                                  Beigelman L,
(RIBO-) RIBOZYME PHARM INC
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Best Local Similarity 88.9
Matches 16; Conservative
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                                                                                                                                           WPI; 2003-679889/64
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The present invention relates to a method for identifying a subject at tisk of breast cancer. The method comprising detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The nucleic acid sample comprises the DiG1 region (ADO79402), KIAA0783 region (ADO79403), DPF3 region (ADO79404) or CENPC1 region (ADO79405), The gene DiG1 (discs).

CC comprises the DiG1 region (ADO79405), The gene DiG1 (discs), DPF3 region (ADO79404) or CENPC1 region (ADO79405), DPF3 region (ADO79404) or CENPC1 region (ADO79405), DPF3 region (ADO79405), DPF3 region (ADO79404) or CENPC1 region (ADO79405), DPF3 region (ADO79404) or CENPC1 has been mapped to chromosomal position 7221.3. The KIAA0783 protein is a control of the region of trials. The present sequence was used in an example from the invention Sequence 19 BP; 10 A; 3 C; 4 G; 2 T; 0 U; 0 Other;

0.8%; Score 14.8; DB 1; Length 19; 88.9%; Pred. No. 6.5e+02; live 0; Mismatches 2; Indels 663 CAAAGGCAAAAGCAAGCT 680 CAAAAGCAAAAGTAAGCT 16; Conservative Local Similarity Query Match Best Loca Matches

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Gaps

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14-MAY-1998 AAV12449; RESULT 557 AAV12449/c

Synthetic

03-MAY-1996;

Goddard A; Gesundheit N, Carlsson LMS, Attie KM,

Disclosure; Page 7; 133pp; English

This is a forward PCR primer designed for use with a reverse primer (see AAVS2682) in the PCR amplification of exon 8 and the flanking introns (see AAVS26565 of the human hepatocyte nuclear factor-4 alpha (HNF-4 alpha) gene (see AAVS2687). Mutations of the HNF-4 alpha gene have been identified by amplifying (see AAVS2665-86) and sequencing the appropriate exon. The invention concerns the identification of genes responsible for

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Treatment of partial growth hormone insensitivity syndrome - with growth hormone or insulin-like growth factor.
                                                                                                                                                                                                                            Growth hormone receptor; GHR: human; insulin like growth factor-1; partial growth hormone insensitivity syndrome; IGF-1; short stature; PCR primer; ss.
                                                                                                                                                                      Growth hormone receptor PCR primer P3.
AAV12449 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97WO-US006652.
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                                                                                                               (first entry)
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The present sequence represents a PCR primer for growth hormone receptor (GRR) used in an example of the present invention. The present invention describes new methods for increasing the growth rate of a human patient having partial growth hormone insensitivity syndrome (GHLS) or a non-Growth Hormone (GH)-deficient short stature but not Laron Syndrome; the patient has a height of at least -2 standard deviations (GD) below normal for age and sex, has a serum level of high-affinity GH-binding protein of at least 2 SD below normal, has serum levels of insulin-like growth at least 2 SD below normal mean levels and has a mean level or maximum stimulated serum level of GH that is at least normal, and growth rate is increased by administering an effective amount of GH and/or IGF-I. The methods are used to treat people with short stature including familial stature. The patient especially has a heterologous intra- or stature or growth growth or idiopathic short stature.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Isolated nucleic acid encoding hepatocyte nuclear factor 1-alpha and beta - useful for detecting susceptibility for non-insulin dependent diabetes, especially maturity-onset diabetes of the young.
                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transcription factor; maturity onset diabetes of the young; TCF14; diabetes; NIDDM; diagnosis; therapy; PCR; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                 2; Indels
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                                                                                                                                                                                                                                                                             Sequence 20 BP; 8 A; 1 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                               Query Match 0.8%; Score 14.8; DB 1; Best Local Similarity 88.9%; Pred. No. 6.8e+02; Matches 16; Conservative 0; Mismatches 2;
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96US-0028056P.
96US-0029679P.
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Horikawa Y;
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non-insulin dependent diabetes mellitus (NIDDM) for use in diagnostics and therapeutics. It demonstrates that the MODY1 (maturity-onset diabetes of the young) locus is the HMF-4 alpha gene. Analysis of mutations in the HMF-4 alpha gene can be diagnostic for diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Vaccine; eye disease; conventional trachoma; nonendemic trachoma; paratrachoma; inclusion conjunctivits; genital disease; perihepatitis; nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer; bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ORFS) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAZ01424) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microoraganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal uretritis, epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis; pneumopathy in breast feeding infants; and veneral lymphogranulomatosis. The polypeptides of the invention may be of use in treating these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primers AAZ01426-Z06209 were used to amplify open reading frames
                                                                                                                                                                           Gaps
                                                                                                                                                                           ;
                                                                                                                                 0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                 Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure, Page 1476, 1755pp; English.
                                                                                                                                                                                                              691 CTTGTGGCACTCAAGGAG 708
                                                                                                                                                                                                                                                  CTTGTGTCACACAAGGAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97FR-00016034.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-IB001939.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97FR-00015041
                                                                                                                                                                                                                                                                                                                                                    AAZ01841 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                           16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-371125/31.
                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W09928475-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-DEC-1997;
04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                           07-0CT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                         AAZ01841;
                                                                                                                                                                                                                                                    18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diseases
                                                                                                                                                                                                                                                                                                              RESULT 559
                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                  AAZ0184
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This sequence represents a PCR primer that can be used in the method of the invention. The method is for genetic diagnosis using human micochondrial DNA where there is at least one base replacement from among the following five replacements: the 3010th base is changed from guanine to adenine; the 4883rd base from cytosine to thymine; the 5178th base from cytosine to thymine; the 5178th base the 14668th base from cytosine to thymine; and the 14668th base from cytosine to thymine; and diagnosing the probability of contracting adult diseases. A confirmation of base replacement can give a diagnosis of the level of probability of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genetic diagnosis using human mitochondrial DNA - comprises detecting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Deletion sequence oligonuclectide; sensor array; eukaryotic pathogen; probe; cellular adhesion modulator; cellular proliferation modulator; human retrovirus; non-human retrovirus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
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88.9%; Pred. No. 6.8e+02;
rative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                  primer; human; mitochondrial DNA; genetic diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 2 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                      PCR primer H11791 for mitochondrial DNA analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Deletion sequence oligonucleotide 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 6; 15pp; Japanese.
856 AAGGACCTGAAGCAGTAC 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCAAGGACCTCAAACAC 783
                                         20
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                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                              adult disease contraction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         contraction of adult diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97JP-00279127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97JP-00279127
                         AAGGACCTGAAGAAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            crcaaggacrrcaaacrc
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                                                                                                                                                         AAX79768 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-320841/27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX23550 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   base replacements.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TANA/) TANAKA M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-JUN-1999
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Local Si.
                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JP11113597-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-OCT-1997;
                                                                                                                                                                                                                                              17-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     991
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                                                                                                                                                                                                     AAX79768;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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Gaps

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0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02; iive 0; Mismatches 2; Indels

Conservative

Query Match Best Local Similarity Matches 16; Conserv

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This invention describes a novel composition comprising a number of sensor arrays, where each array comprises a unique probe oligonucleotide, which is the reverse complement of part of a unique target which is the reverse complement of part of a unique target coligonucleotide present in a mixture of target deletion sequence oligonucleotides. The compositions form a method for characterizing a sample of target deletion oligonucleotides which are labelled and hybridize with the probe oligonucleotides of the sensor arrays. Such oligonucleotides and their targets are represented in AAX3548*X23709. Oligonucleotides characterized by the method form pharmaceutical compositions that are useful for modulating cellular adhesion or proliferation, and being active against a eukaryotic pathogen, a human rectorive against a eukaryotic pathogen, a human cretrovirus, including influence virus (EMV), or a non-human retrovirus, including influence virus, Epstein-Barr virus, Respiratory Syncytial virus or cytomegalovirus (CMV). The compositions enable characterization of deletion sequence oligonucleotides having related, continued in uncleobase sequences, and quantification of different uncleobase sequence ("target") oligonucleotides in a mixture. Species of deletion sequence ("target") oligonucleotides in a mixture.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ó
                                                                                                                                                                                                                                                                                                                                           New compositions comprising sensor arrays made up of unique probe oligonucleotides - useful for characterizing a sample of target deletion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                region;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gag gene; MLV; retrovirus particle; recombinant adenovirus; El regi
E4 region; nucleic acid transfer; animal model; gene regulation;
bioavailability; gene therapy; neurodegeneration; tumour;
autoimmune disease; infection; genetic vaccination; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primer used to amplify the 5' cistron of the gag gene of MoMLV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 90; 163pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    132 GATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ36936 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 GAAGAAGAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Moloney murine leukemia virus.
                                                                                                                                                    98WO-US018084.
                                                                                                                                                                                      97US-00923771.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 88.9°
Matches 16; Conservative
                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     oligodeoxynucleotides
                                                                                                                                                                                                                                                                Chen D, Srivatsa GS;
                                                                                                                                                                                                                                                                                                   WPI; 1999-205198/17.
                                                                                                                                                                                                                                                                                                                                                                                oligonucleotides.
HIV; primer; ss
                                                                                                                                                                                        02-SEP-1997;
                                                                          WO9911820-A1
                                                                                                                                                  01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-MAR-2000
                                                                                                               11-MAR-1999
                                       Synthetic.
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                                                                                                                                                                                                                                                                                                                                                        PCR primers AA236935-36 were used to amplify an EcoRI/BrsG1 fragment containing 5' distron of the gag gene of Moloney murine leukemia virus (MoMLV). The amplified fragment was used to construct the retrovirus particles of the invention. All the genetic elements needed to construct these retroviral particle are incorporated into one or more recombinant adenoviruses that are defective for at least all or part of the El and B4 regions. The retroviral particles formed are defective, but infectious, and transfer nucleic acid very efficiently. The amplified products are used for in vitro or ex vivo production of retroviral particles and for preparation of a product intended for production of retroviral particles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modulation; signal transducer and activator of transcription;
DNA-binding protein; signal transduction; inhibition; apoptosis;
inflammatory disease; cancer; antinflammatory; antirheumatic;
cytostatic; immunostimulatory; rheumatoid arthritis; leukaemia; myeloma;
melanoma; lymphoma; diagnosis; ss.
                                                                                                                                                                                                                                                                         Producing retroviral particles from recombinant, defective adenoviruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                in vivo. The particles produced are used to transfer nucleic acid into cells, to create animal models of disease which are useful for studying gene regulation and bioavailability. The retroviral particles are also useful for gene therapy of neurodegeneration, tumours, autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disease, infection or many other disorders and for genetic vaccination
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human STAT3 phosphorothioate antisense oligonucleotide SEQ ID NO:27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; mouse; STAT3; phosphorothioate; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                         Salzmann J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 3 A; 2 C; 12 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                      Klatzmann D,
                                                                                                                                                                                                                                                                                          useful for gene therapy or vaccination.
                                                                                                                                                                                                       Perricandet M,
                                                                                                                                                                                                                                                                                                                        Example 1; Page 23; 73pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                    RHON ) RHONE-POULENC RORER SA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                   99WO-FR001184.
                                                                                                                    98FR-00006258.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-APR-2000; 2000WO-US009054.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           554 CCCTCAGCCGCCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18 cccraagccrccccrcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC93176 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-FEB-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                      (GENO-) GENOPOIETIC SARL
                                                                                                                                                                                                                                        WPI; 2000-072443/06.
                                                                                                                                                                                                      Yeh P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200061602-A1
              WO9960144-A1
                                                                                  L8-MAY-1999;
                                                                                                                    L8-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                25-NOV-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16;
                                                                                                                                                                                                      Forrent C,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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08-APR-1999;

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Example 2; Page 46; 104pp; English.
                                                                                                                     from the present invention
      (ISIS-) ISIS PHARM INC
                   WPI; 2000-619223/59
                                                                                                                                                                                  19-APR-2001
                                                                                                                                        16;
                                    and cancer
                                                                                                                                                    2
                                                                                                                                 Query Match
                                                                                                                                                                           AAF32480
                                                                                                                                    Local
                                                                                                                                        Matches
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ö Gaps Agrobacterium tumefaciens NT1130; 1,5-anhydroglucitol dehydrogenase; 1,5-AGDH; detection; diabetes; PCR primer; ss. ö 0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02; 1,5-anhydroglucitol dehydrogenase PCR primer SEQ ID NO:24. 2; Indels 0; Mismatches (DAIL-) DAIICHI KAKAGU YAKUHIN KK. 922 CIGITCCAGCTGCTCGT 939 19 AAF32480 standard; DNA; 20 BP 99JP-00133157 99JP-00133157 crerrecaecrecrecar (first entry) Agrobacterium tumefaciens. Conservative Similarity JP2000316570-A 13-MAY-1999; 13-MAY-1999; 21-NOV-2000

ò.

Gaps

. 0

Query Match 0.8%; Score 14.8; DB 1; Length 20; Best Local Similarity 88.9%; Pred. No. 6.8e+02; Matches 16; Conservative 0; Mismatches 2; Indels

Sequence 20 BP; 3 A; 5 C; 12 G; 0 T; 0 U; 0 Other;

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A gene encoding 1,5-anhydroglucitol dehydrogenase, a recombinant vector containing the gene, a transformant containing the recombinant vector and a recombinant 1,5-anhydroglucitol dehydrogenase protein prepared from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention provides the protein and coding sequences of human NADH ubiquinone oxidoreductase 20KD subunit, designated BioNADH20. The sequences can be used in the treatment of cancer and retrograde diseases in the nervous system. The present sequence is a PCR primer for the
                                                                                                                                                                                                                                                                                            The present invention describes the 1,5-anhydroglucitol dehydrogenase protein (1,5-AGDH) isolated from Agrobacterium tumefaciens. The 1,5-AGDH protein is useful as a detecting reagent for early stage diabetes. The present sequence represents a PCR primer for 1,5-AGDH, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, NADH ubiquinone oxidoreductase 20KD subunit, BioNADH20; cancer;
nervous system disease; retrograde disease; gene therapy; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human NADH ubiquinone oxidoreductase 20KD subunit cDNA PCR primer #2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New human NADH ubiquinone oxido-reductase 20KD subunit for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.8; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                retrograde diseases in the nervous system and cancer,.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 6.8e+02
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SHEN-) SHENGYUAN GENE DEV CO LTD SHANGHAI.
                                                                                                                                                                                                                                             Example 2; Page 17; 22pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          coding sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     365 AGAGTGACCAGGCTTCAG 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 AGAGTGACCAGACTTGAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                            WPI; 2001-128253/14.
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hes 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-NOV-1999;
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                                                                                                                                                                                       transformant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes an antisense compound (I), 8 to 30

cucleobases in length, that is targeted to a nucleic acid molecule
cucleobases in length, that is targeted to a nucleic acid molecule
cucleobases in length, that is targeted to a nucleic acid molecule
cucleobases in length, that is targeted to a nucleic acid molecule
cucleobases or condition of STAT3 in cells or tissues, treating an animal having a disease or condition associated with STAT3 or a human
cucleobase or condition characterised by a reduction in apoptosis,
and inducing apoptosis in a cell. Diseases or conditions that are treated
and/or neck, leukaemia, myeloma, melanoma or lymphoma. (I) can also be
cused for diagnostic methods in detecting and determining the role of
styry3 in various cell functions, physiological processes and conditions
and for diagnostic the conditions associated with expression of STAT3.
(I) can be used alone or with other drugs as an immunostimulator. (I) is
used in sandwich and colourimetric assays, involving enzyme conjugation
and radiolabeling and is used in diagnostic kites AAC93150 encodes human
STAT3 and AAC93231 encodes mouse STAT3 as given in the exemplification of
the present involving and subcodes
contracted the second contraction of the present involving ensure or subcodes
contracted that are subcodes mouse STAT3 as given in the exemplification of
the present involving and subcodes
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contracted that are subcodes mouse STAT3 as given in the exemplification of
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contrac
                                                                                                                                                                                                                                             New antisense compound for inhibiting the expression of signal transducer and activator of transcription 3 (STAT3) in cells or tissues and treating diseases or condition associated with STAT3, such as rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              represent STAT3 phosphorothioate antisense oligonucleotides, and AAC93300 represents a mismatch control oligonucleotide which are used in example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
         99US-00288461
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Gaps

0

BP.

ABL45558 standard; DNA; 20

RESULT 567

ABL45558

(first entry)

11-APR-2002

ABL45558;

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The invention relates to antisense compounds targeted to a nucleic acid molecule encoding a signal transducer and activator of transcription (STAT) protein, specifically STAT3, where the antisense compounds inhibit the expression of STAT3. The antisense sequences are useful for inhibiting the expression of STAT3 in cells or tissues, inducing Fasmediated apoptosis in cells, and sensitising cells to apoptosis. They are also useful for treating an animal having a disease or condition associated with STAT3. These disorders include inflammatory or autoimmune disease, particularly rheumatoid arthritis, cancers, such as those of the breast, prostate, brain and head and neck and leukaemias, myslomas. Melanomas and lymphomas. Also treatable are human diseases or conditions characterised by a reduction in apoptosis or an insensitivity to apoptotic signals. The sequences of the invention can be used in clinical cresearch, for detecting and determining the role of STAT3 in various cell functions and physiological processes and for diagnosing conditions associated with the expression of STAT3. The sequences represent cDNA encoding human STAT3 and human STAT3 oligonucleotides
                                                                                                                                                                                                                                                                                                                                   antisense gene therapy; Fas-mediated apoptosis; inflammatory disease; utodimunue disease; themmatoid arthritis; cancer; breast; prostate; head; neck; brain; leukaemia; myeloma; melanoma; lymphoma; apoptosis; antiinflammatory; immunosuppressive; antiinflammatory; immunosuppressive; antiinflammatory;
                                                                                                                                                                                                                                                                                                                  STAT3; human; signal transducer and activator of transcription; ss; STAT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel antisense compound useful for treating and diagnosing inflammatory diseases and cancers, is targeted to a nucleic acid molecule encoding signal transducer and activator of transcription proteins.
                                                                                                                                                                                                                                                                          Human STAT3 antisense phosphorothioate oligodeoxynucleotide #26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; Page 13; 21pp; English.
554 CCCTCAGCCGCCGCCTCC 571
                     20 CCCTCGGCTGCCGCCTCC 3
                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JAN-2001; 2001US-00758881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-APR-1999; 99US-00288461.
06-APR-2000; 2000WO-US009054.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%;
                                                                                                                                           AAS96793 standard; DNA; 20
                                                                                                                                                                                                                                 (first entry)
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Best Local Similarity 88.9
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (KARR/) KARRAS J G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2001029250-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                 26-FEB-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                        cytostatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Karras JG;
                                                                                                                                                                                       AAS96793;
                                                                                                    RESULT 566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
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The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker computivell plates; (b) a primer designed based on the chromosome marker complished for plates from the resultant complified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the maximum in the specified discrimination Nos. succeed to completely in each wells of longitudinal completely in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the capellates are specified from the amplified by using the above primer; (g) signals can discrimination nos. are mixed clones are cultured and the constituted as the positions on the chromosome and arrayed. The constituted as the positions on the chromosome and arrayed. The constituted as the positions on the chromosome and arrayed. The correspondence of the primers for human chromosome ligits. Which are specifically claimed for use in the present invention
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0
                                                                                                                      Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
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                                                                                     Human chromosome 21q22.1 PCR primer SEQ ID NO:2602.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 6; Page 56; 528pp; Japanese.
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                                                                                                                                                                                                                                                                                 12-MAR-2001; 2001JP-00068285.
                                                                                                                                                                                                                                                                                                                    10-MAR-2000; 2000JP-00066716.
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                                                                                                                                                                                                                                                                                                                                                   (RIKA) RIKAGAKU KENKYUSHO.
(GENO-) GENOTEX YG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                            Arraying genome clones.
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                                                                                                                                          PCR primer; ss.
                                                                                                                                                                                                            JP2001321190-A.
                                                                                                                                                                             Homo sapiens.
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AAD35074
ID AAD3507
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AC AAD3507
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Gaps

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922 CTGTTCCAGCTGCTCCGT 939

CTGTTCCAGCTGCTGCAT 19

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(first entry)

25-JUL-2002

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Human Stat3 antisense oligonucleotide #8.

Human; signal transducer and activator of transcription 3; ischaemia; immune response; Stat3; coronary atherosclerosis; vascular occlusion; hypoxia; stroke; angiogenesis; myocardial infarction; hypoglycaemia; inflammation; chronic obstructive pulmonary disease; cardiac arrest; insulin dependent diabetes mellitus; emphysema; trauma; scleroderma; shock; chronic active hepatitis; adult respiratory distress syndrome; nitrogen necrosis; proliferative angiopathy; autoimmune thyroiditis; sjogren's syndrome; multiple sclerosis; Addison's disease; epilepsy; polymyositis; rheumatoid arthritis; autoimmune infertility; anaemia; proliferative disease; disease, disease; disease; disease; carcinoma; degenerative disorder; gene therapy; growth deficiency; cirrhosis; hypoproliferative disorder; lesion; antisense; ss.
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WO200220032-A1

14-MAR-2002

10-SEP-2001; 2001WO-US028254.

38-SEP-2000; 2000US-0231212P.

(UYJO) UNIV JOHNS HOPKINS. (UYSF-) UNIV SOUTH FLORIDA.

Yu H, Pardoll D, Jove R, Dalton W;

WPI; 2002-362218/39

Modulating angiogenesis and an immune response in an individual, for treating a hypoxic or ischemic condition, comprises administering a compound that modulates the activity of a signal transducer and activator of transcription 3.

Disclosure; Page 32; 94pp; English.

The invention relates to a method of modulating angiogenesis and immune response. Method involves administering to an individual a compound that modulate the activity of signal transducer and activator of transcription 3 (Stat3). Modulating angiogenesis is useful for treating or preventing, hypoxic or ischaemic condition or disorder which is the result of stroke, ischaemia, coronary atherosclerosis, myocardial infarction, inflammation, tissue ischaemia in the lower extremities, infarction, inflammation, tissue ischaemia in the lower extremities, infarction, inflammation, chronic obstructive pulmonary disease, choking, asphyxia, hypoglycaemia, children necrosis, proliferative angiopathy e.g. diabetic microangiopathy with necvascularisation. Suppressing an immune response is useful for with necvascularisation of an autoimmune disease such as systemic lupus crythematosus, multiple sclerosis, insulin dependent diabetes mellitus, syndrome, scleroderma, polymyositis, chronic active hepatitis, anaemia, autoimmune thyroiditis, idiopathic Addison's disease, vitiligo, gluten-sensitive enteropathy, autoimmune neutropenia, myaschenia gravis, idiopathic thrombocytopenia purpura, Grave's disease, ovitiligo, gluten-sensitive enteropathy, autoimmune neutropenia, myaschenia gravis, idiopathic proliferative and oncoganic disease which includes sarcomas and carcinomas e.g., bladder carcinoma, colon carcinoma, chronic leukaemia, fibrosarcoma, liposarcoma, degenerative discorders, growth deficiency, hypoproliferative discorders, phypical trauma, lesions and wounds. The method is also used in gene therapy. The present sequence is human Stat3

Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

0.8%; Score 14.8; DB 1; Length 20;

Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a compound 8-50 nucleobases in length targeted to a nucleic acid molecule encoding dual specific phosphatase 5, where the compound specifically hybridises with and inhibits the expression of dual specific phosphatase 5. The compound is used for treating an animal having a disease or condition associated with dual specific phosphatase 5 such as a hyperproliferative disorder, a developmental disorder, an inflammatory disorder or a disease which arises from aberrant apoptosis. Sequences ABX09062-ABX09139 represent human dual specific phosphatase 5 phosphorothioate oligonucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antisense modulation of dual specific phosphatase 5 expression used in treating disorders e.g. inflammatory diseases.
                                                                                                                                                                                                                                                                                      Human; dual specific phosphatase 5; 8s; developmental disorder;
hyperproliferative disorder; inflammatory disorder aberrant apoptosis;
antiinflammatory; oytostatic; antiapoptotic; antiproliferative;
phosphorothioate oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                              Gaps
                                                                                                                                                                                                                                                          Human dual specific phosphatase 5 phosphorothioate oligonucleotide
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0
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88.9%; Pred. No. 6.8e+02;
tive 0; Mismatches 2; Indels
                              Indels
Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP, 2 A, 7 C, 7 G, 4 T, 0 U, 0 Other;
                              0; Mismatches
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                                                                                                                                                                    BP
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               88.98;
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                                                                                        crerrccaecrecrecar
                                                            922 CTGTTCCAGCTGCTCCGT
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                              16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-041418/03.
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les 16; Conserv
                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                WO200297108-A2.
                                                                                                                                                                                                                                                                                                                                                                     sapiens
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                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
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                                                                                                                                                                                                  ABX09073;
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                                                                                                                                         RESULT 569
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                                 Matches
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Given in ABR43625 to ABR43633. CLASP sequences have immunosuppressive, antiinflammatory, antiinheumatic, antiarthritic, dermacrological and nathifammatory, antiinheumatic, antiarthritic, dermacrological and nephrotropic activities. Compositions comprising a CLASP-1 protein can be used for treating or preventing a CLASP-1 mediated disease, particularly an autoimmune disease caused or exacerbated by increased activity of TH1 (helper T) cells. CLASP polymuchocitides can be used as probes or primers for detecting CLASP expression, for screening CLASP agonists or antagonists, for creating transgenic animals, chromosome mapping, antagonists, for maintute biological samples, polymorphic markers for forensic analysis, and as reagents for paternity testing. CLASP polymuchocides or polypeptides are useful in treating or preventing autoimmune diseases (e.g. Addison's disease, rheumatoid arthritis, or dermatitis), organ rejection or graft-versus-host diseases, inflammation (e.g. sepsis, arthritis or nephritis), or infectious diseases. Accessed to ACC65727 and ABR43642 represent sequences given in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New cadhesin-like asymmetry protein (CLASP) polypeptides and polynucleotides, useful for treating or preventing autoimmune diseases, organ rejection or graft-versus-host disease, inflammation, or infectious
                                                                             cadherin-like asymmetry protein; immune response; immunosuppressive; antiinflammatory; antirheumatic; antiarthritic; dermatological; nephrotropic; autoimmune disease; Addison's disease; dermatilis; rheumatoid arthritis; organ rejection; graft-versus-host disease; inflammation; sepsis; arthritis; nephritis; infectious disease;
                                     Human; mouse; CLASP membrane protein; CLASP; cell surface molecule; cadherin-like asymmetry protein: immine reconnections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 10 A; 5 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     exemplification of the present invention
                 Mouse CLASP-5 PCR primer SEQ ID NO:85.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Page 119; 398pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Candia AF
                                                                                                                                                                                                                                                                                                                                                                                                                         03-AUG-2001; 2001US-0310028P,
15-OCT-2001; 2001US-00978244,
                                                                                                                                                                                                                                                                                                                                                                                 02-AUG-2002; 2002WO-US024482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 AACATCATCAACAAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ARBO-) ARBOR VITA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-354593/33
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Garman JD,
                                                                                                                                                                                                                                                                                          WO2003025120-A2
                                                                                                                                                                                    PCR primer; ss
                                                                                                                                                                                                                                                                                                                                       27-MAR-2003
                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                Mus sp
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Matches
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                          Gaps
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0
Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
  0.8%;
                       16; Conservative
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906 889 AACATCATCAACATGCAC

ABZ70994 standard; DNA; 20 BP RESULT 571

(first entry) 28-APR-2003 ABZ70994/C ID ABZ709 XX AC ABZ709 XX DT 28-APR XX

ABZ70994;

cancer; antisense oligonucleotide; 2'-0-methoxyethyl; 2'-MOE; control; Human; HKR1; cytostatic; HKR1 inhibitor; hyperproliferative disorder; Human HKR1 phosphorothioate antisense oligonucleotide SEQ ID NO:22 /note= "2'-0-methoxyethyl (2'-MOE) nucleotides" 16. .20 $not\bar{e}=$ "2'-O-methoxyethyl (2'-MOE) nucleotides' 'note= "phosphorothioate linkages" Location/Qualifiers *tag= a mod base= OTHER 'mod base= OTHER Q υ *tag= /*tag= .20 *tag= phosphorothicate; ss. Key modified base modified_base modified base Homo sapiens

WO2003004513-A1

16-JAN-2003

02-JUL-2002; 2002WO-US021090

03-JUL-2001; 2001US-00898556

(ISIS-) ISIS PHARM INC

Bennett FC,

WPI; 2003-210336/20.

New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding HKR1, useful for treating a disease/condition associated with HKR1, such as hyperproliferative disorder, e.g. lung, brain or breast cancer.

Example 15; Page 72; 105pp; English.

targeted to, and which specifically hybridises with a nucleic acid described. (1) a compound 8-50 nucleobases in length that specifically hybridises with at least an 8-nucleobase portion of an active site on nucleic acid molecule encoding HKR1, (2) a composition comprising the compound and a carrier or diluent; (3) a method for inhibiting the expression of HKR1 in cells or tissues by contacting the conjound so that expression of HKR1 is inhibited; and (4) a method of treating an animal having a disease or condition associated with HKR1 by administering to the animal a therapeutic or prophylactic amount of the compound so that expression of HKR1 is inhibited. HKR1 amount of the compound so that expression of HKR1 is inhibited. HKR1 antisense oligonucleotides have cytostatic activities and can be used as HKR1 inhibitors. The compound, composition and methods are useful for treating a disease or condition associated with HKR1, such as a hyperproliferative disorder, e.g. lung, brain or breast cancer, by inhibiting the expression of HKR1. They are also useful in research and diagnostics for modulating the expression of HKR1. The present sequence represents a human HKR1 chimeric phosphorothioate oligonucleotide having 2'-O-methoxyethyl (2'-MOE) wings and a deoxy gap, which is an antisense oligonucleotide used in the inhibition of human HKR1 in an example from The present invention describes a compound 8-50 nucleobases in length the present invention

Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

ö Gaps ; 0 Length 20; Indels Score 14.8; DB 1; Pred. No. 6.8e+02; 0; Mismatches 2; 0; Query Match 0.8%; Best Local Similarity 88.9%; 16; Conservative Matches

673 AGCAAGCTCACAGACAAC 690

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18

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The present invention describes a compound (I) that is 8-50 nucleobases in length: (a) targets a nucleic acid molecule encoding major histocompatibility complex (MHC) class II transactivator, and specifically hybridises with the nucleic acid encoding the MHC class II transactivator, or (b) specifically hybridises with the nucleic acid encoding the MHC class II transactivator, or (b) specifically hybridises with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding MHC class II transactivator. (I) has immunosuppressive, antimicrobial, antidabetic, antirheumatic, antiarthritic, cycostatic, notropic, neuroprotective and immunostimulant activities, and can be used as an MHC class II transactivator inhibitor. The MHC class II transactivator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides for modulating MHC class II transactivator gene expression, particularly useful for treating autoimmune disorders such as transplant rejection, Alzheimer's disease, or multiple sclerosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "phosphorothioate linkages; all cytidine residues
                                                                                                                                                                    Human; major histocompatibility complex class II transactivator; MRC class II transactivator; antisense modulation; Humanosuppressive; antimicrobial; antidiabetic; antirheumatic; antiarthritic; cytostatic; noctropic; neuroprotective; mmunostimulant; autoimmune disorder; MRC class II transactivator inhibitor; infection; transplant rejection; diabetes; rheumatoid arthritis, cancer; Alzheimer's disease; multiple sclerosis; severe combined immunodeficiency disease;
                                                                                                                                     MHC class II transactivator antisense oligonucleotide SEQ ID NO:80.
                                                                                                                                                                                                                                                                                              phosphorothioate; antisense oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
/note= "2'-O-methoxyethyls"
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        not\overline{e} = "2' - 0 - methoxyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   are 5-methylcytidines
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                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                  mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER
                                BP
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                                ACF39677 standard; DNA; 20
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                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       *tag= b
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                                                                                                                                                                                                                                                                                                                                                                                                                  *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
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                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or infection
                                                                                                     29-SEP-2003
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                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                  ACF39677;
            RESULT 572
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to low
               disease or condition associated with MHC class II transactivator, e.g. autoimmune disorder or infection. The antisense oligomucleotides can be used for inhibiting the expression of MHC class II transactivator in cells or tissues. In particular, these diseases include transplant rejection, diabetes, rheumatoid arthritis, cancer, Alzheimer's disease, multiple sclerosis, or severe combined immunodeficiency disease. The antisense compounds are useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence represents a human MHC class II transactivator chimeric phosphorothioate antisense
                                                                                                                                                                                                         oligonucleotide, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   low bone mineral density; BMD; bone damage; polymorphism; osteoporosis; single nucleotide polymorphism; SNP; PCR primer; ss; human.
antisense oligonucleotides can be used for treating an animal having a
                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Galwey N, Bennett S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Determining whether an individual is predisposed to susceptibility t
bone mineral density (BMD) and/or bone damage, involves identifying
polymorphisms in associated genes.
                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                     0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IGF503 polymorphism marker PCR primer B primer seq.
                                                                                                                                                                                                                                                Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mangion J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 8; Page 237; 246pp; English.
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                                                                                                                                                                                                                                                                                                                                                                        1567 CCTGACTCAGGCAGGCCA 1584
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04-NOV-2002; 2002US-0423559P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADC98368 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                                      Conservative
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Schafer A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-559156/52.
                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003054218-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADC98368;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 573
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WPI; 2003-819215/77.
                   WPI; 2003-441555/41.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention.
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Burgess CE, Caeman SJ, Chapoval A, Dhanabal M, Edinger SR, Eisen A;
Ellerman K, Ettenberg S, Gangolli EA, Gerlach VL, Gorman L;
Grosse WM, Guo X, Hackett C, Ji W, Kekuda R, Khramtsov NV;
Lepley DM, Li L, Macdougall JR, Malyankar UM, Mazur A, Mcqueeney K;
Mezes PS, Miller CE, Millet I, Mishra VS, Padigaru M, Patturajan M;
Pena CEA, Peyman JA, Rastelli L, Rieger DK, Shenoy SG, Shimkets RA;
Smithson G, Starling G, Spytek KA, Stone DJ, Tchernev VT, Twomlow N;
Vernet CAM, Zerhusen BD, Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NOVX; antidiabetic; anorectic; cardiant; hypotensive; antiatreficosfarctic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiatthritic; antiinflammatory; dermatological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antiasthmatic; antilipaemic; metabolic; diabetes; obesity; infectious; anorexia, cancer; cardiovascular; hypertension; atherosclerosis; neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy, immune; ostecarthritis; haemopoletic; inflammatory skin; asthma; dyslipidaemia; neurogeneesis; call differentiation; proliferation; haemopolesis; wound healing; angiogeneeis; gene therapy; chromosome mapping; tissue typing; human; NOV; PCR; primer; ss; RT-PCR.
                                                                                                      Gaps
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0
                                                       Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                             Forward Ag5335 RT-PCR primer used to amplify human NOV RNA
                 Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                           311 TCAGCTCTGCACCAGAGA 328
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2001US-0341540P
2001US-0344297P
2001US-0344297P
2001US-0344303P
2002US-037288P
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2001US-0338285P.
2001US-0341346P.
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28-MAY-2002; 2002US-0383534P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002US-0384024P.
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                                                       Query Match

0.8%;

Best Local Similarity 88.9%;

Matches 16; Conservative
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                                                                                                                                                                      18 TCATCTCTGCACCTGAGA
                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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ADE2

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ADE2

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ADE3

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The invention relates to a novel isolated NOVX polypeptide. The polypeptide of the invention demonstrates, antidiabetic, ancretic, acardiant, hypotensive, antiarteriosclerotic, virucide, antiparterial, tungicide, protozoacide, notropic, neuroprotective, antiparkinsonian, anticorvulsant, osteopathic, antiarthritic, antiinflammatory fungicide, protozoacide, molecules and antilofammatory. The dermatological, nucleic acid antilopaemic activities. The losy peptides, nucleic acid antilopaemic activities. The losy peptides, nucleic acid antibodies and antibodies may be useful for treating or diagnosing diseases including metabolic disorders such as diabetes and obseity, infectious diseases, anorexia, cancer, cardiovascular diseases including hypertension and atherosclerosis, neurodegenerative disorders such as Alzheimer's disease, Parkinson's disease and epilepsy, immune disorders e.g. osteoarthritis, haemopoietic disorders, inflammatory skin disorders, e.g. osteoarthritis, haemopoietic disorders, and polypeptides may also be used to differentiation and proliferation, hemopoiesis, wound healing and angiogenesis, as well as in gene therapy. Finally, the nucleic acids may conventive medicine and pharmacogenomics. The current sequence is that of the RT-PCR primer which was used within the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections
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Pred. No. 6.8e+02;
0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                 Example C; SEQ ID NO 301; 447pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1530 GCTACAAAAGGAGGCCAG 1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GCTACAAAGGGAGCCAG 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-DEC-2001; 2001JP-00377637.
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                                 The invention comprises isolated human gene sequences and PCR primer sequences which can be used to detect single nucleotide polymorphisms (SNPs). The DNA sequences of the invention are useful for detecting SNPs existing in human genes and for the diagnosis of human disease. The present DNA sequence represents a human gene PCR primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pharmaceutical composition for treating ailments associated with impaired
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   first active agent comprising an oligomuclectide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 muclectides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory; antiallergic; antiinflammatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a novel pharmaceutical composition, which has a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                           2; Indels
                                                                                                                                                                                  Score 14.8; DB 1; Length
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
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                                                                                                                                                     Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               lung inflammation; respiratory disease; ds.
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2; SEQ ID NO 1490; 529pp; Japanese.
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Tang L, Shahabuddin S;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human oligonucleotide sequence.
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                                                                                                                                                                                                                                                                923 TGTTCCAGCTGCTCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                ABZ93374 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                      Local Similarity
wes 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                     ABZ93374;
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                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                             576
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The invention describes a method of determining the ethnic origin of a male comprising obtaining a nucleic acid sample from the male, and dentifying at least two polymorphic markers in the nucleic acid sample indicative of the ethnic origin of the male, using at least one primer pair given in the specification. Also described is a method of: identifying polymorphic sites in a nucleic acid, a kit for determining the ethnic origin of an individual; determining the ethnic origin of an indoiridual; an isolated nucleic acid segment of origin of a human male individual; an isolated nucleic acid segment of a human y chromosome comprising at least 10 contiguous bases including at least one of the polymorphic sites given in the specification; and determining the paternity of a human male conditional. The method is useful for determining the ethnic origin of a nucleic individual. The method is useful for determining the ethnic origin of a male, for paternity testing, for forensic studies or for diagnosis. This sequence represents a primer used to detect polymorphisms in the non-recombining region of the human Y chromosome (NRY).
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                               receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPPO
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to adenosine, reducing levels of adenosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                            Length 20;
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                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                            Score 14.8; DB 1;
Pred. No. 6.8e+02;
); Mismatches 2;
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ID ADM65705 standard; DNA; 20 BP.
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       sensitivity
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Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrentaric agonist; respiratory disease; pulmonary vasconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes a novel composition (a) a first active agent,
                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisense; bronchoconstriction; allergy; hyposecretion; pain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      respiratory tract inflammation, adenosine sensitivity, lung, cancer, surfactant depletion, antiallergic, antiinflammatory, antiasthmatic,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ä
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                                                                    0.8%; Score 14.8; DB 1; Length 20;
llarity 88.9%; Pred. No. 6.8e+02;
Conservative 0; Mismatches 2; Indels
Sequence 20 BP; 1 A; 4 C; 8 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            emphysema; chronic obstructive pulmonary disease
pulmonary transplantation rejection; ss; primer.
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L, Shahabuddin S;
                                                                                                                                                                                                                       1063 CCAACAAAGACATACTCC 1080
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Tang L,
                                                                                              Local Similarity
nes 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nyce JW,
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABD29604;
                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 578
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                                                                                                                                               Matches
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           with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to
inflammation, allergies and/or surfactant hypoproduction are associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMRT inhibitor; cytostatic; antiinflammatory; antiarthritic;
antirheumatic; antisense therapy; inflammatory disorder;
rheumatoid arthritis; hyperproliferative disorder; cancer; leukaemia;
breast cancer; human; phosphorothioate; ss; chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mod_base= OTHER
/note= "phosphorothioate linkages, and all cytidine
residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human SMRT chimeric phosphorothioate oligonucleotide SEQ ID NO:32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       silencing mediator for retinoid and thyroid hormone action;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel antisense compound targeted to nucleic acid encoding SMRT
                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                           Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "2'-0-methoxyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "2'-0-methoxyethyls"
                                                                                                                                                                                                                                                                        prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1291 CTGTCCAACGAGGAGTTC 1308
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADG86318 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                       16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-082184/08.
                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
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modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADG86318;
                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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the present invertion describes a compound (1) acounticeobases in the present invertion describes a compound (1) specifically hybridises with the nucleic acid molecule encoding SNRT and inhibits expression of with the nucleic acid molecule encoding SNRT and inhibits expression of SNRT. (1) specifically hybridises with at least 8-nucleobase portion of a preferred target region on nucleic acid molecule encoding SNRT. Also described is a composition (II) comprising (I) and a carrier or diluent. (I) and (II) have cytostatic, antiinflammatory, antiarthritic and antichemmatic activities, and can be used in antisense therapy, and as SNRT expression inhibitors. (I) is useful for inhibiting the expression of SNRT in cells or tissues. (I) is also useful for treating an animal having a disease or condition associated with SNRT, e.g., inflammatory disorder such as rheumatoid arthritis; or a hyperproliferative disorder such as rheumatoid arthritis; or a hyperproliferative disorder expression of SNRT. (I) is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. The present sequence companies of the present contains the present sequence is designated as SEQ ID NO.30 in chambiour. (I) the present sequence is designated as SEQ ID NO.30 in example 15 but corresponds to SEQ ID NO.32 in the Sequence Listing.
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                                                                                                                               The present invention describes a compound (I) 8-50 nucleobases in length
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(silencing mediator for retinoid and thyroid hormone action), useful for treating animal having disease associated with SMRT such as cancer, rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SMRT; silencing mediator for retinoid and thyroid hormone action; SMRT inhibitor; cycostatic; antiinflammatory; antiarthritic; antirheumatic; antisense therapy; inflammatory disorder; rheumatoid arthritis; hyperproliferative disorder; cancer; leukaemia; breast cancer; human; ss; target.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;
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                                                                                   Example 15; SEQ ID NO 32; 260pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human SMRT target region SEQ ID NO:63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     304 GGCCCACTCAGCTCTGCA 321
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAR-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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transported to a nucleic acid molecule encoding SMRT (silencing mediator for retinoid and thyroid hormone action), where (1) specifically hybridises with the nucleic acid molecule encoding SMRT and inhibits expression of SMRT. (1) specifically hybridises with at least 8-nucleobase portion of a preferred target region on nucleic acid molecule encoding SMRT. Also described is a composition (11) comprising (1) and acarrier or diluent. (1) and (11) have cytostatic, antidflammatory, antiarthritic and antirheumatic activities, and can be used in antisense therapy, and as SMRT in cells or tissues. (1) is useful for training the expression of SMRT in cells or tissues. (1) is useful for training the expression of SMRT in cells or condition associated with SMRT, e.g., inflammatory disorder such as rheumatoid arthritis; or a hyperproliferative disorder such as rheumatoid arthritis; or a hyperproliferative disorder such as rheumatoid arthritis; or a hyperproliferative disorder corphylaxis and as research reagents and breast cancer, by inhibiting the expression of SMRT target region sequence. The present sequence represents a human SMRT target region sequence; which is used in an example from the present invention. N.B. The present sequence is example from the present invention. N.B. The present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·,
                                                                                                   The present invention describes a compound (I) 8-50 nucleobases in length
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are 5-methylcytidines"
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/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; antidiabetic; antiinfertility; gene therapy;
cyclin-dependent kinase 4; diabetes; infertility;
hyperproliferative disorder; cancer; antisense technology; human; ss.
treating animal having disease associated with SMRT such as cancer, rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cyclin dependent kinase 4 antisense oligonucleotide #28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 4 A; 5 C; 9 G; 2 T; 0 U; 0 Other;
                                                           Example 15; SEQ ID NO 63; 260pp; English
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Best Local Similarity 88.9
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                        16; Conservative
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        (ISIS-) ISIS PHARM INC
                                               WPI; 2004-022085/02
                                                                                                                                                                                                                                             Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                   ADI19239;
                            Watt AT;
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                                                                                                                                                                                                                                                                                                                              583
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                                                                                                                                                          The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonucleotide is useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a human cyclin dependent kinase 4 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mod_base= OTHER
/note= "OTHER= Phosphorothioate backbone. All cytidines
                                                                                       New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding cyclin-dependent kinase 4, useful for preparing a composition for treating diabetes, infertility or hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mod_base= OTHER
/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'note= "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides'
                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene therapy, antisense technology, PCTAIRE protein kinase 2, neurological disorder; human, PCTAIRE protein kinase 2; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human PCTAIRE protein kinase 2 antisense oligonucleotide #24.
                                                                                                                                                                                                                                                                           0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                        Seguence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                          Example 15; SEQ ID NO 47; 90pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             are 5-methylcytidines"
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/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                   254 CTGGAGAGGCCCCCACAC 271
                                                 Dobie KW;
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                                                                                                                                                                                                                                                                                                                                                                                        ADI19170 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAY-2002; 2002US-00160787
        02-JUL-2002; 2002US-00188779
                                                                                                                                                                                                                                                                                                                                      3 crasasasscccccrcac
                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15. .20
                                                                                                                                                                                                                                                                                                16; Conservative
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/*tag=
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                                                                                                                        disorder, e.g., cancer.
                            (ISIS-) ISIS PHARM INC
                                                  Freier SM,
                                                                      WPI; 2004-081710/08
                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003225256-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified
                                                                                                                                                                                                                                                                                                                                                                                                             ADI19170;
                                                                                                                                                                                                                                                                             Query Match
                                                  Dean NM,
                                                                                                                                                                                                                                                                                       Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                     RESULT 582
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/mod_base= OTHER=
/note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding PCTAIRE protein kinase 2, useful for preparing a composition for treating neurological disorders.
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/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
15. .20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PCTAIRE protein kinase 2 antisense oligonucleotide #93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                            Claim 1; SEQ ID NO 37; 58pp; English.
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/mod_base= OTHER
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WPI; 2004-143840/14.
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                                                                                     The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE protein kinase 2, that specifically hybridises with the nucleic acid encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp. The antisense oligonucleotide is useful for preparing a composition for treating e.g., neurological disorders. This sequence represents a human PCTAIRE protein kinase 2 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide; cytostatic; antiinflammatory; antimicrobial; antisense gene therapy; kinase inhibitor; hyperpoliferative disorder; cancer; non-small cell lung cancer; ossophageal cancer; infection; inflammation; tumour; human; phosphorothioate; 2'-O-methoxyethyl; ss.
                            New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding PCTAIRE protein kinase 2, useful for preparing a composition for treating neurological disorders.
                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                             Human polo-like kinase antisense oligonucleotide SEQ ID NO:32.
                                                                                                                                                                                        0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note= "phosphorothioate linkages"
                                                                                                                                                                    Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "2'-O-methoxyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /\text{note} = "2' - 0 - \text{methoxyethyls}"
                                                                     Example 15; SEQ ID NO 106; 58pp; English
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                                                                                                                                                                                                                                 365 AGAGTGACCAGGCTTCAG 382
                                                                                                                                                                                                                                                  1 AGAGTGACCAAGCTTCTG 18
                                                                                                                                                                                                                                                                                                     BP.
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                                                                                                                                                                                                                                                                                                    ADJ33972 standard; DNA; 20
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                                                                                                                                                                                      Query Match
Best Local Similarity 88.9
Matches 16; Conservative
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*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wyatt JR, Freier SM;
        WPI; 2004-022085/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2004011610-A2
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
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                                                                                                                                                                                                                                                                                 RESULT 584
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The present invention describes a compound (1) of 8-80 nucleobases in length targeted to a nucleic acid molecule encoding polo-like kinase, where (1) specifically hybridises with at least an 8-nucleobase portion of a polo-like kinase, or specifically hybridises with at least an 8-nucleobase portion of a preferred target region on a nucleic acid molecule encoding polo-like preferred target region on a nucleic acid molecule encoding polo-like preferred target region on anucleic acid molecule encoding polo-like compression of polo-like kinase. Also described: (1) a composition comprising (1) and a pharmaceutical carrier or diluent; (2) inhibiting the expression of polo-like kinase in cells or tissues comprising contacting the cells or tissues with (1); (3) treating an animal having a disease or condition associated with polo-like kinase comprising administering to the animal a therapeutic or prophylactic amount of (1) so that expression of polo-like comprising contacting a preferred target region of a nucleic acid molecule encoding polo-like kinase with one or more candidate antisense compounds comprising at least an 8-nucleobase portion which is compounds comprising at least an 8-nucleobase portion which is compounds comprising at least an 8-nucleobase portion which is compounds comprising an entisense compounds which inhibits the expression of antisense compounds (1) can be used for inhibits the expression of antisense or compounds (1) can be used for inhibiting the associated with aberrant expression of polo-like kinase, e.g. hyperproliferative disorder such as cancer, including non-small cell lung cancer or coephageal cancer. The antisense compounds are also useful as research reagents and kits, or in diagnostic, therapeutic and prophylactic applications, e.g. to prevent or delay infection, inflammation or tunnour formation: The present sequence represents a human polo-like kinase chimeric phosphorochioate antisense oligonucleotide, which is used in an example from the present invention.
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New antisense compounds targeted to nucleic acid molecules encoding pololike kinase, useful for treating diseases associated with aberrant expression of polo-like kinase, e.g. non-small cell lung cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide; cycostatic; antisense gene therapy; kinase inhibitor; hyperproliferative disorder; cancer; hyperproliferative non-small cell lung cancer; oseophageal cancer; infection; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
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88.9%; Pred. No. 6.8e+02;
ve 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 32; 138pp; English
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                                                                                                                                                           esophageal cancer
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RESULT 587
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                                                                                                                                                                                   New antisense compounds targeted to nucleic acid molecules encoding pololike kinase, useful for treating diseases associated with aberrant expression of polo-like kinase, e.g. non-small cell lung cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 99; 138pp; English
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                      25-JUL-2003; 2003WO-US023413
                                                         30-JUL-2002; 2002US-00209405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the present invention.
                                                                                         (ISIS-) ISIS PHARM INC
                                                                                                                            Freier SM;
                                                                                                                                                          WPI; 2004-143840/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                             esophageal cancer.
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                                                                                                                            Wyatt JR,
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ID ADJ88
XX
XX ADJ89
DT 06-M
XX XX Nucl
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restriction endonuclease site; T3 promoter site; Tag gene; Poly A site; T7 Promoter; nucleic acid analysis; synthetic Tag gene; assay control;

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This invention relates to a novel DNA molecule which comprises a DNA molecule made up of the following elements in a 5' to 3' direction: a first restriction endomuclease site; a T3 promoter site; at least one Tag gene comprising at least 5 20mer Tag sequences; a poly A site having at least 21 consecutive A residues, a second restriction endomuclease site which may be the same or different than the first restriction endomuclease site promoter. The invention may be useful in nucleic acid analysis, in particular to synthetic Tag genes useful as assay controls, in assay development, product development and validation and for quality control. The present sequence is that of a Tag oligonucleotide probe which may be used during the creation of the novel DNA molecule of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                               New DNA molecules made by annealing and extending overlapping 60mer oligonuclectides, useful in producing synthetic Tag genes useful as assay controls, in assay development, product development and for quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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88.9%; Pred. No. 6.8e+02;
ve 0; Mismatches 2; Indels
assay development; product development; product validation; quality control; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human; single nucleotide polymorphism; SNP; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 575; 91pp; English.
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                                                                                                                                                                                                                                                                           12-JUL-2002; 2002US-0395530P.
                                                                                                                                                                                                                                 14-JUL-2003; 2003WO-US021990.
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                                                                                                                                                                                                                                                                                                                          (AFFY-) AFFYMETRIX INC
                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-122923/12.
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                                                                                               Unidentified
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                                                                               Synthetic
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BP.

ADJ17762 standard; DNA; 20

RESULT

(first entry)

20-MAY-2004

ADJ17762;

18 ACACCGAGACACCAAGCC 1

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                                                                                                                                                         The present invention relates to a polynucleotide isolated from a human gene and is useful for detecting a single nucleotide polymorphism in a human gene or for diagnosing of disease. The invention enables the detection of a single nucleotide polymorphism in a human gene. The present sequence represents a primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a polynucleotide isolated from a human gene and is useful for detecting a single nucleotide polymorphism in a human gene or for diagnosing of disease. The invention enables the detection of a single nucleotide polymorphism in a human gene. The present sequence represents a primer of the invention.
                                                                Novel polynucleotide useful for PCR amplification along with two DNA fragment from another set of sequences, or for detecting single nucleotide polymorphism in human gene.
                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                           Query Match
0.8%; Score 14.8; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                         Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
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                                                                                                                           Claim 2; SEQ ID NO 5887; 2627pp; Japanese.
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(KAGA-) KAGAKU GLJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                              Novel polynucleotide useful for
                                                                                                                                                                                                                                                                                                                                                           375 GGCTTCAGCCACGTCCTC 392
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                                WPI; 2004-093977/10.
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This invention relates to novel antisense compounds useful for modulating the expression of liver related homologue-1 (LRH1) and splice variants threeof. Specifically, it refers to compositions 8-30 nucleobases in length that target a portion of active site on the nucleic acid molecule encoding LRH1 (also known as NRSA2). LRH1 is a monomeric orphan nuclear receptor protein that functions as a tissue specific transcription factor. The present invention describes antisense oligonucleotides that comprise at least one modified internucleoside linkage, a phosphorothioate linkage; at least one modified sugar moiety, a 2'-O-methoxyethy1 (2' NDE) and at least one modified nucleobase, a 5-methylcytidine. These antisense compounds are useful for treating or diagnosing a disease associated with LRH1, such as breast cancer, dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
                                                                                                                                   human; ss; liver related homologue-1; LKH1; NR5A2; antisense; phosphorothicate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis; low HDL; high density lipoprotein; high LDL; hypercholesterolaemia; gall stone; triglyceridaemia; obesity; heparitis; heparcocliular carcinoma; aromatase; cytostatic; antilipaemic; antiarteriosclerotic; anorectic; heparotropic; litholytic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (2' MOE) nucleotides. All
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                                                                                                      Antisense DNA oligo used to modulate human LRH1 expression SeqID 2312.
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cytidine nucleobases are 5-methylcytidine.
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/mod_base= OTHER
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972 ACACCGAGACCTCAAGCC 989

Local Similarity 88.9

Matches

Query Match

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Gaps

; 0

0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels

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New antisense oligonucleotides targeted to a nucleic acid encoding liver related homologue-1 (LRH1), useful for treating breast cancer,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mod_base= OTHER /methoxyethyl (2' MOE) nucleotides. All /note= "OTHER= 2' methoxyethyl (2' MOE) nucleobases are 5-methylcytidine."
                                                                                                                                                                                                                                                                                                                                                                                                                          human; ss; liver related homologue-1; LRH1; NR5A2; antisense; phosphorothicate; 2' MOB; breast cancer; dyslipidaemia; atherosclerosis; low HDL; high density lipoprotein; high LDL; hypercholesterolaemia; gall stone; triglyceridaemia; obesity; hepaticis; hypercholesterolaemia; hepatocellular carcinoma; aromatase; cytostatic; antilipaemic; antiarteriosclerotic; anarectic; hepatotropic; litholytic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                methoxyethyl (2' MOE) nucleotides. All
ses are 5-methylcytidine."
       triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic hepatitis, as well as hepatocellular carcinoma or a condition associated with aromatase activity. Accordingly, these compositions exhibit cytostatic, antilipaemic, antiarrisoclarotic, anorectic, hepatotropic, litholytic, antilnflammatory and virucidal activities. This oligonucleotide sequence is an antisense DNA oligo used to modulate the expression of the human LRH1 protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                 Antisense DNA oligo used to modulate human LRH1 expression SeqID 2958.
                                                                                                                                                                                   Gaps
LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
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                                                                                                                                                       Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
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                                                                                                                             Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
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cytidine nucleobases
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                                                                                                                                                               0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antiinflammatory; virucidal.
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                                                                                                                                                             Query Match
Best Local Similarity 88.9
Matches 16; Conservative
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ADJ18408/
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This invention relates to novel antisense compounds useful for modulating the expression of liver related homologue-1 (LAH1) and splice variants the expression of liver related homologue-1 (LAH1) and splice variants thereof. Specifically, it refers to compositions 8-30 nucleobases in the related bording LAH1 (also known as NREAD). LEMH1 is a monomeric orphan molear receptor protein that functions as a tissue specific conclement comprise at least one modified internucleoside congonucleotides that comprise at least one modified internucleoside congonucleotides that comprise at least one modified sugar moiety, linkage, a phosphorothioate linkage; at least one modified sugar moiety. Inkage, a phosphorothioate linkage; at least one modified sugar moiety. Inkage. These antisense compounds are useful for treating or emplycytidian af isease associated with LRH1, such as breast cancer, displicamia, atherosclerosis, low HDL (high density lipoprotein), hypercholesterolaemia, gall stones, consition, as well as hepatocellular carcinoma or a condition associated with aromatase activity. Accordingly, these compositions exhibit conficuents and antistense compositions exhibit conficuents an antistense bus observed the invention.

Cytoscatic, antilipaemic, antiatreriosclerocic, anorectic, hepatotropic, cytoscatic, antilipaemic, antistense bus observed to modulate the oligonucleotide sequence is an antisense bus oligo used to modulate the cytoscaticn of the human LRH1 protein of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human; ss; liver related homologue-1; LRH1; NR5A2; antisense; phosphorothicate; 2' MOE, breast cancer; dyslipidaemia; atherosclerosis; low HDL; high density lipoprotein; high LDL; hypercholesterolaemia; and l stone; triglyceridaemia; obesity; hepaticitis; hepatocellular carcinoma; aromatase; cytostatic; antilipaemic; antiarteriosclerotic; anorectic; hepatotropic; litholytic;
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dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
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/label= OTHER= phosphorothioate backbone
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88.9%; Pred. No. 6.8e+02;
ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
                                          Example 15; SEQ ID NO 2958; 909pp; English.
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Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADJ17467;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADJ17467/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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06-NOV-2001; 2001US-0333072P. 09-NOV-2001; 2001US-0345398P. 09-NOV-2001; 2001US-0348283P. 15-NOV-2001; 2001US-0335610P. 21-NOV-2001; 2001US-0335152P. 28-NOV-2001; 2001US-0333152P.

05-NOV-2002; 2002US-00287971

US2004067882-A1.

08-APR-2004

2001US-0338626P

29-NOV-2001; 2001US-0334300P. 04-DEC-2001; 2001US-0336576P. 04-DEC-2002; 20001US-035676P. 15-MAY-2002; 2002US-0380568P. 16-MAY-2002; 2002US-0381043P.

02-JUL-2002; 2002US-0393262P. 06-AUG-2002; 2002US-0401479P.

2002US-0401626P 2002US-0401593P. 2002US-0401695P. 2002US-0406181P

ALSOBROOK J P. ALVAREZ E.

26-AUG-2002;

ANDERSON D W.

ANDE/

BARON M.

(BARO/) (BOLD/) (BURG/) (CASM/)

BOLDOG F L.
BURGESS C E.
CASNAN S J.
CHAPOVAL A.
DHANDBAL M.
EDINGER S R.
EISEN A.
ELLERMAN K.
ELLERMAN K.
ETTENBERG S.
GANGOLLI E A.
GERLACH V.
GROSKE W M.

(EDIN/) (EISE/) (ELLE/)

DHAN/

 \mathbf{x}

(ETTE/) (GANG/) (GERL/) (GORM/)

2002US-0393148P

16-MAY-2002; 02-JUL-2002;

29-NOV-2001; 2001US-00997425.

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01-JUL-2003; 2003WO-US020865.
                      01-JUL-2002; 2002US-0392813P
                            (PHAA ) PHARMACIA CORP
                                        WPI; 2004-083058/08.
   WO2004003201-A2.
         08-JAN-2004
                                  Kane CD;
                                                                                                                                           Query Match
                                                                                                                                                                      RESULT 592
                                                                                                                                                                         ADM93669
à
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This invention relates to novel antisense compounds useful for modulating the expression of liver related hamcloque-1 (LRHI) and splice variants of thereof. Specifically, it refers to compositions 8-30 mucleobases in length that target a portion of an active site on the nucleic acid molecule encoding LRHI (also known as NEA2). LRHI is a monomeric orphan cranscription factor. The present invention describes antisense curscription factor. The present invention describes antisense configuration factor. The present invention describes antisense coligonucleotides that comprise at least one modified internucleoside inkage, a phosphorothioate linkage; at least one modified sugar moiety, a 2'-O-methoxyethyl (2' MOE) and at least one modified sugar moiety, methylcytidine. These antisense compounds are useful for treating or diagnosing a disease associated with LRHI, such as breast cancer, cyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), hyperoblesterolaemia, gall stones, cyfslipidaemia, obesity, hepaticles virus-mediated acute or chronic cytostatic, antilipaemic, antilatreriosclerotic, ancectic, hepatotropic, cytostatic, antilipaemic, antilatreriosclerotic, ancectic, hepatotropic, coligonucleotide sequence is an antisense DNA oligo used to modulate the vary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
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ö
                                           Gaps
                                         .
0
0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
ative 0; Mismatches 2; Indels
                                    2; Indels
            Best_Local Similarity 88.9
Matches 16; Conservative
```

LI L. MACDOUGALL J R. MALYANKAR U M.

(LILL/) (LEPL/

MALY/ (MAZU/

MAZUR A.
MCQUEENBY K.
MEZES P S.
MILLER C B.
MILLET I.

PADIGARU M. PATTURAJAN M. PENA C E A. PEYMAN J A. RASTELLI L.

(MISH/

(MILL/ (MILL/ PADI/ (PATT/ PENA/ PEYM/ RIEG/

(MEZE)

KEKUDA R. KHRAMTSOV N V. LEPLEY D M.

GUO X. HACKETT C.

(GUOX/) (HACK/) (JIWW/) GROS/

KEKU/)

ADM93669 standard; DNA; 20 BP. (first entry) Human NOVX PCR primer #13. 01-JUL-2004 ADM93669;

Human; NOVX; PCR; ss; congenital heart defect; cardiomyopathy; atherosclerosis; hypertension; pulmonary stenosis; scleroderma; adenocarcinoma; haemophilia; graft-versus-host disease; cancer; neurodegenerative disorder; Alzheimer: s disease; Parkinson's disease; multiple sclerosis; diabetes; obesity; bronchial asthma; acquired immunodeficiency syndrome; AIDS; Crohn's disease; infectious disease; anorexia; immune disorder; primer.

ROTHENBERG M E.

RIEGER D K.

RAST/

SHENOY G. SHIMKETS R A SMITHSON G. SPADERNA S K

(SPAD/)

(SMIT/ (STAR/)

SHEN/

Homo sapiens

New antisense oligonucleotides targeted to a nucleic acid encoding liver related homologue-1 (LRH1), useful for treating breast cancer, dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis. Example 15; SEQ ID NO 2017; 909pp; English.

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modified base
                                                                                                                                                                                                                                 modified base
                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                08-APR-2004.
                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gierse JK;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ischemia
                                                                                        Synthetic
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to human NOVX polypeptides and the polymucleotides are useful for encoding them. The NOVX polypeptides and polymucleotides are useful for determining the presence of or predisposition to a disease associated determining the presence of or predisposition to a disease associated with altered levels of the sequences in a mammalian subject, and for treating or preventing a pathology associated with NOVX. The propertides, polymucleotides and antibodies that bind immunospecifically cto the polypeptides are useful for treating or preventing disorders or to the polypeptides are useful for treating or preventing disorders or syndromes such as compenital heart defects, cardiomyopathy.

CC syndromes such as compenital heart defects, cardiomyopathy, atheroscierosis, hypertension, pulmonary stenosis, soleroderma, compendence denocarcinoma, haemophilia, graft-versus-host disease, cancer, adenocarcinoma, haemophilia, graft-versus-host disease, ascherosis, diabetes, obesity, bronchial asthma, acquired multiple sclerosis, diabetes, obesity, bronchial asthma, acquired norexia and immune disorders. This sequence represents a PCR primer used to amplify a human NOVX polymucleotide of the invention. Note: The sequence date for this patent is also available from USPTO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; antiinflammatory; neuroprotective; notropic; antiarthitic; vasotropic; ophthalmological; immunomodulatory; cardiovascular; gene therapy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                     JP, Alvarez E, Anderson DW, Baron M, Boldog FL;
Casman SJ, Chapoval A, Dhanabal M, Bdinger SR, Eisen A;
C, Ettenberg S, Gangolli EA, Gerlach V, Gorman L;
Guo X, Hackett C, Ji W, Kekuda R, Khramtsov NV;
Li L, Madougall JR, Malyankar UM, Mazur A, Mcqueeney K;
Li L, Madougall JR, Mishra V, Padigaru M, Patturajan M;
Miller CE, Millet I, Mishra V, Padigaru M, Ratturajan M;
Peyman JA, Rastelli L, Rieger DK, Rothenberg ME;
Shimkets RA, Smithson G, Spaderna SK, Starling G;
Stone DJ, Tchernev VT, Twomlow N, Vernet CAM;
                                                                                                                                                                                                                                                                                                                                                                                                    Novel isolated NOVX polypeptide useful treating or preventing disorders or syndromes such as Alzheimer's disease, Parkinson's disease, multiple sclerosis, diabetes, obesity, cancer, bronchial asthma, Crohn's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:638.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example C; SEQ ID NO 301; 330pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1530 GCTACAAAGGAGGCCAG 1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seqdata.uspto.gov/sequence.html.
                                                                                                                                                                                                                                                                                                                                          Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTACAAAAGGGAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADM14451 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                                                                                                                                                                                   Pena CEA, Peyman JA, Ra
Shenoy SG, Shimkets RA,
Spytek KA, Stone DJ, To
                                                                                                                                                                                                                                                                                                                                          Voss EZ,
                                                                                  VERNET C A M.
ZERHUSEN B D.
VOSS E Z.
                                 STONE D J.
TCHERNEV V T.
                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-355303/33.
                  SPYTEK K A.
                                                                   TWOMLOW N.
                                                                                                                                          ZHONG M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUL-2004
                                                                                                                                                                                                                                                                                                                                               Zerhusen BD,
                                                                                                                                                                                                   Burgess CE,
Ellerman K,
Grosse WM, G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADM14451;
                                                                                                                                                                                                                                                       Lepley DM,
Mezes PS,
                                                                                                                                                                                    Alsobrook
                                                                                                            (ZERH/)
(VOSS/)
(ZHON/)
                                                                         (TWOM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 593
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                    SPYT/)
                                                      TCHE/)
                                     STON/)
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The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mpGES-1). The thuman microsomal prostaglandin E2 synthase (mpGES-1). The thuman microsomal prostaglandin also describes: (1) antisense compounds, 9434.3. The present invention also describes: (1) antisense compounds, compass-1, which specifically hybridise with the nucleic acid encoding mpGES-1, which specifically hybridise with the nucleic acid encoding compass-1, which specifically hybridise with the nucleic acid mpGES-1 and inhibits its expression; (2) a method of inhibiting the expression of inhibits its expression; (2) a method of inhibiting the antimal cross of antisense oligonucleotides and antisense compounds have cytostatic, antisense oligonucleotides and antisense compounds have cytostatic, antisense oligonucleotides and antisense compounds have cytostatic, antishamatory, neuroprotective, nootropic, antiarthritic, vasotropic, antiinflammatory, neuroprotective, nootropic, antiarthritie, and can ophthalmological, immunomodulatory and cardiovascular activities, and can condition associated with mpGES-1 e.g., inflammation, Altheimer's condition associated with mpGES-1 e.g., inflammation, Altheimer's condition associated with mpGES-1 e.g., inflammation, altheimer's cohthalmic, immunological, cardiovascular or neurological disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g. inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                /note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
Alzheimer's disease, arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "2'-0-methoxyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "2'-0-methocyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 4; SEQ ID NO 638; 132pp; English.
                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        508 GGCTACCTGGAGAAGCTG 525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                 'mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gccraccragadadera 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-SEP-2003; 2003WO-US030374.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      *tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16. .20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-305094/28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2004028458-A2
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ö

/mod_base= OTHER /note= "Phosphorothioate linkages and all cytidines are 5 -methylcytidines"

/mod_base= OTHER /note= "2'-methoxyethyl residues" 16. .20

′*tag= a

modified base

/note= "2'-methoxyethyl residues"

US2004092465-A1

13-MAY-2004.

11-NOV-2002; 2002US-00293864. 11-NOV-2002; 2002US-00293864.

(ISIS-) ISIS PHARM INC

Dobie KW;

WPI; 2004-374983/35.

/*tag= c /mod_base= OTHER

modified_base

Human; antisense; ss; Huntingtin interacting protein 1; HIP1; cellular apoptosis; Huntington's disease; chromosome 7q11.23.

Human; antisense; ss;

Location/Qualifiers

Key modified_base

Homo sapiens

Q

...20 *tag=

Human HIP1 antisense oligonucleotide ISIS251585.

```
The invention relates to an isolated, mutant murine or human phospholipase C (PLC) gamma-2 protein. The mutant PLCgamma-2 proteins and nucleic acids that encode them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate PLCgamma-2 treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of PLCgamma-2 by expressing inactive proteins or to supplement the patients administered to down regulate PLCgamma-2 expression. The PLCgamma-2 administered to down regulate PLCgamma-2 expression. The PLCgamma-2 modulators of PLCgamma-2 expression and activity. The antibodies and modulators of PLCgamma-2 expression and activity. The antibodies and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mutant muirine or human Phospholipase C (PLC) gamma-2 proteins, useful for preventing, diagnosing and treating inflammatory diseases, e.g. Wegener's granulomatosis, Churg-Strauss syndrome or Polyarteritis nodosa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antagonists may also be used to down regulate expression and activity. Disorders that may be prevented, diagnosed and/or treated by the above methods include, e.g. Wegener's granulomatosis, Churg-Strauss syndrome or Polyarteritis nodosa. This sequence corresponds to a PCR primer to amplify the mouse phospholipase C gamma 2 gene.
                                                                                                                                                                                  ss; primer; anti-inflammatory; dermatological; osteopathic; ophthalmological; antiulcer; murine; human; phospholipase C gamma-2 protein; diagnosis; Wegener's granulomatosis; Churg-Strauss syndrome; Polyarteritis nodosa.
                                                                                                                                               Mouse phospholipase C gamma 2 gene amplification primer plcg2-40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.88+02;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hanke P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yu P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 4; SEQ ID NO 56; 229pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Schroeder A,
                                  ADO80387 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                          01-SEP-2003; 2003WO-EP009690.
                                                                                                                                                                                                                                                                                                                                                                                                                               30-AUG-2002; 2002US-0407517P
                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INGE-) INGENIUM PHARM AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mudde G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-449493/42.
                                                                                                                                                                                                                                                                                                                    WO2004020619-A1.
                                                                                                            29-JUL-2004
                                                                                                                                                                                                                                                                                 Mus musculus.
                                                                                                                                                                                                                                                                                                                                                       11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Constien R,
                                                                         AD080387;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
RESULT 594
                   AD080387/c
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The invention relates to a compound targeted to a nucleic acid molecule conciding huntingtin interacting protein 1, HIP1. The compound, 8-80 nucleobases in length, is an antisense oligonucleotide, where the compound specifically hybridises with the nucleic acid molecule encoding compound specifically hybridises with the nucleic acid molecule encoding huntingtin interacting protein 1 comprising a sequence appearing as a NNO1766 and inhibits the expression of huntingtin interacting protein 1. The expression of huntingtin interacting protein 1, a diagnostic method for identifying a disease of contracting protein 1, a diagnostic method for identifying a disease of animal having a disease or condition associated with huntingtin conteracting protein 1 compound so that expression of huntingtin interacting protein 1 is inhibited. The compound and the methods are useful in treating an animal having a disease or condition involving dysregulation of cellular apoptosis e.g. Huntington's disease. The HIPI continents on the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New compound that modulates huntingtin interacting protein 1 expression, useful in treating an animal having a disease or condition involving dysregulation of cellular apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.8; DB 1; Length 20;
18.9%; Pred. No. 6.8e+02;
Ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85pp; English,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         987 GCCCCAGAACCTGCTCAT 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GCCCCACATCCTGCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 18;
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Best Local Similarity 88.9°
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Gaps

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652 GCCACCGTCTACAAAGGC 669

16; Conservative

Best Local Similarity Matches 16; Conserv

19

g à

ADN01780 standard; DNA; 20

RESULT 595

ADN01780;

ADNO1780 ID ADNO XX AC ADNO XX DT 29-JI

29-JUL-2004 (first entry)

RESULT 596

10017621-3sl.rng

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18 CTGCTTGGCTCCAAGGAC
                                                                                                                            24-APR-2002; 2002US-00131831
20-DEC-2002; 2002US-00325899
                                                                                                      24-APR-2003; 2003WO-US012946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX09234 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-MAR-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16; Conservative
                                                                                                                                                                                          X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                              WPI; 2004-400724/37.
                                                                                                                                                                                          Wohlgemuth J, Fry
Rosenberg S;
                                                        WO2004042346-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
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                                                                                  21-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX09234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 598
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              huntingth interacting protein 1 comprising a sequence appearing as huntingth interacting protein 1 comprising a sequence appearing as huntingth interacting protein 1.

Also included are inhibiting the expression of huntingth interacting protein 1.

Also included are inhibiting the expression of huntingth interacting protein 1 in cells as a same of manifold of a modulator of huntingtin interacting protein 1, a diagnostic method for identifying a disease state, a kit or assay device comprising the compound and treating an animal having a disease or condition associated with huntingtin interacting protein 1 compound so that expression of huntingtin interacting protein 1 is inhibited. The compound and the methods are useful in treating an animal having a disease or condition involving dysregulation of cellular apoptosis e.g. Huntington's disease. The HIPI dysregulation charged region from the HIPI cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a compound targeted to a nucleic acid molecule encoding huntingtin interacting protein 1, HIPL The compound, 8-80 nucleobases in length, is an antisense oligonucleotide, where the compound specifically hybridises with the nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                           New compound that modulates huntingtin interacting protein 1 expression, useful in treating an animal having a disease or condition involving dysregulation of cellular apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
                                                                                                               Human; antisense; ss; Huntingtin interacting protein 1; HIP1; cellular apoptosis; Huntington's disease; chromosome 7q11.23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                        Human HIP1 antisense target sequence ISIS168101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Set 2 right PCR primer for marker probe #162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 96; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   987 GCCCCAGAACCTGCTCAT 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 GCCCCACATCCTGCTCAT 3
                  ADN01858 standard; cDNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88.9%;
                                                                                                                                                                                                                            11-NOV-2002; 2002US-00293864.
                                                                                                                                                                                                                                                    11-NOV-2002; 2002US-00293864
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 88.9
Matches 16; Conservative
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                                                                     (first entry
                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                            WPI; 2004-374983/35
                                                                                                                                                                                 JS2004092465-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-AUG-2004
                                                                                                                                                           Homo sapiens
                                                                     29-JUL-2004
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                                                                                                                                                                                                                                                                                                       Dobie KW;
                                               ADN01858;
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XX
XX
AC ADP1:
XX
XX
DT 12-A:
XX
XX
            ADN01858/c
ID ADN018
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The present invention relates to diagnosing or monitoring transplant crejection, e.g. cardiac or kidney transplant rejection, in an individual comprises detecting the expression level of one or more genes. The comprises detecting the expression level of one or monitoring methods, system and kits are useful in diagnosing or monitoring creation rejection, e.g. heart, kidney, liver, pancreas, pancreatic ransplant rejection, or mechanical organ replacement rejection, in an experimental rejection or mechanical organ replacement rejection, in an individual. The method is also useful in diagnosing and monitoring an individual. The methods are also useful in diagnosing and monitoring contain, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or viral, bacterial or fungal infection. The present sequence represents a viral, bacterial or fungal infection. The present sequence represents a primer for a 50 mer oligonucleotide marker for diagnosis and monitoring of allograft rejection and other disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic islet, lung, bone marrow or stem cell transplant rejection, in an individual, comprises detecting the expression level of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Polymorphism; biallelic; human; forensic; paternity testing; disease; detection; phenotypic typing; characteristic; infection; hereditary; autoimmume disease; cancer; inflammation; drug; therapy; medicament; treatment; marker; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
transplant rejection; immune system; rheumatoid arthritis; lupus;
inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Morris M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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88.9%; Pred. No. 6.8e+02;
ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human biallelic polymorphic marker upstream primer #114.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prentice J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ly N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 58; SEQ ID NO 2065; 1762pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (EXPR-) EXPRESSION DIAGNOSTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Woodward R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1120 CIGCITGGGTCCACGGAC 1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
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AAX09121-X10268 are allele-specific oligonucleotide primers used in the isolation of various biallelic polymorphic markers found in the human closed in AAX10269-X1293). These primers can be used in action of electricity that is a primers can be used in action of a territy testing polymorphic forms in an individual for use in e.g. forensics, paternity testing or for phenotypic typing for diseases such as agammaglobulinemia diabetes insipidus, lesch-Nyhan syndrome, muscular hypercholesterolemia, polycystic kidney disease, familial spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary syndrome, osteogenesis imperfecta, acute intermittent porphyria, cutoimmune diseases, inflammation, cancer, diseases of the nervous system, infection by pathogenic microorganisms, and characteristics such candurance, fertility, and susceptibility or receptivity to particular cutoim to a solonger can also be used to produce medicaments for the treatment or ronnhulaxia of annih Aiseases
                                                                                                                                                                                                                                           New isolated nucleic acid segments from the human genome - used for determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.
                                                                                                                               (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                                                                                                                                                                                                                      Claim 15; Page 59; 310pp; English.
                                                                                                                                                                        Wang D, Hudson T;
                                                                                                  96US-0030455P.
                                                            97WO-US020313
                                                                                                                                                                                                            WPI; 1998-286974/25.
                                                      05-NOV-1997;
                                                                                            06-NOV-1996;
                   14-MAY-1998
                                                                                                                                                                    Lander ES,
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. 0 ch 0.8%; Score 14.8; DB 1; Length 21; 1 Similarity 88.9%; Pred. No. 7.1e+02; 16; Conservative 0; Mismatches 2; Indels Sequence 21 BP; 1 A; 9 C; 0 G; 11 T; 0 U; 0 Other; 843 18 826 TCCCTCACCCTTGTCTTT 1 Trcrcacccrrrrcrr Best Local Similarity Query Match Matches à g

AAV43747 standard; DNA; 21 (first entry) 16-NOV-1998 AAV43747;

BP

Cancer associated gene primer 16.

ss; cancer; PCR; Northern blotting; ribonuclease protection assay; diagnosis; metastatic cancer; primer; amplification.

WO9837187-A1 Synthetic.

27-AUG-1998

98WO-JP000667. 18-FEB-1998;

97JP-00052508. 21-FEB-1997;

(TAKI) TAKARA SHUZO CO LID.

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Kato I;
    Hino F,
   Asada K,
Yoshikawa Y, Mukai H,
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WPI; 1998-467552/40.

Detection of cancer cells in tissue samples - by changes in mRNA expression compared to normal tissue of specific cancer-associated gene

Disclosure; Page 71; 92pp; Japanese.

The primers AAV43732-V43776 were to produce cancer associated gene fragments which can be used to detect cancer cells in tissue samples or biological fluids. They are detected by monitoring the change in mRNA expression as compared to normal tissue of one or more cancer-associated genes whose cDNA stringently hybridises to the nucleic acid fragments. The change in expression may be an increase or a decrease compared to normal tissue. The mRNA expression may be determined by PCR, Northern in the amount of protection assay, or by determining the change tissue, for example by using a labelled antibody recognising the protein. Detection of cancer cells for cancer diagnosis, including detection of metastatic cancer cells in tissues other than the primary tumour site

Sequence 21 BP; 9 A; 7 C; 2 G; 3 T; 0 U; 0 Other;

; 0 Score 14.8; DB 1; Length 21; Pred. No. 7.1e+02; Indels 0; Mismatches Match Local Similarity 88.9%; 16; Conservative Query Match Matches

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Gaps

8 g RESULT 600

AAZ26230 standard; DNA; 21 30-NOV-1999 (first entry) AAZ26230; AAZ2623(

Human polymorphic region 419.

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Gaps

Polymorphism; human, inhibitor; cancer; treatment; cell growth; LOH; cell viablity; loss of heterozygosity; precancerous condition; ASI; allele specific inhibitor; somatic cell; diagnosis; prevention; atherosclerotic plaque; premalignant metaplastic lesion; endomerriosis; dysplastic lesion; benign tumour; polycystic kidney disease; transplant; graft versus host disease; malignant cell removal; bone marrow; ss.

Homo sapiens

WO9841648-A2

24-SEP-1998.

98WO-US005419. 97US-0041057P 19-MAR-1998; 20-MAR-1997;

(VARI-) VARIAGENICS INC

Stanton VP; Ledley FD, Housman D,

WPI; 1998-521232/44.

Identifying target genes for allele-specific drugs - used for diagnosis, prevention and treatment of, e.g. cancers, atherosclerotic plaque, dysplastic lesions, endometriosis or graft versus host disease.

Disclosure, Fig 7; 605pp, English

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This invention describes a novel method for identifying an inhibitor of potentially useful for treatment of cancer, where the inhibitor is active on a gene vital for cell growth or viability, and where the gene is subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is cused for preventing the development of cancer in a patient having a precancerous condition, by administering to the patient a first allele specific inhibitor (ASI) targeted to an allele of a first essential gene present in cells of the precancerous condition, where the normal somatic cells of the patient are heterozygous for the first gene, the inhibitor calls of the patient are heterozygous for the first gene, the inhibitor calls of the patient are heterozygous for the first gene, the inhibitor of sactive on at least one but less than all allelic forms of the gene or present in a population and targets only one allelic forms present in the diagnosis, prevention and treatment of LOH disorders, e.g. cancers, atherosalerotic plaques, premalignant metaplastic or dysplastic lesions, benign tumours, endometricoiss, polycystic kidney disease, and graft versus host disease. The method can also be used to remove malignant cells from bone matrow transplants AAZ2S812 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH; cell viability; loss of heterozygosity; precancerous condition; ASI; allele specific inhibitor; somatic cell; diagnosis; prevention; stherosclerotic plaque; premalignant metaplastic lesion; endometriosis; dysplastic lesion; benign tumour; polycystic kidney disease; transplant; graft versus host disease; malignant cell removal; bone marrow; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Identifying target genes for allele-specific drugs - used for diagnosis, prevention and treatment of, e.g. cancers, atherosclerotic plaque, dysplastic lesions, endometriosis or graft versus host disease.
                                                                                                                                                                                                                                                                                                                                                   human polymorphic sites described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.8; DB 1; Length 21;
Pred. No. 7.18+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 6 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           991 CAGAACCTGCTCATCAAC 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ26229 standard; DNA; 21 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human polymorphic region 418.
                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Housman D, Ledley FD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1998-521232/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 601
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         used for preventing the development of cancer in a patient having a used for preventing the development of cancer in a patient having a precancerous condition, by administering to the patient a first allele present in cells of the precancerous condition, where the normal somatic cells of the patient are heterozygous for the first gene, the inhibitor is active on at least one but less than all allelic forms of the gene present in a population and targets only one allelic form present in the present in a population and targets only one allelic form present in the used in the diagnosis, prevention and treatment of LOH disorders, e.g. cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic lesions, benign tumours, endometriosis, polycystic kidney disease, and graft versus host disease. The method can also be used to remove malignant cells from bone marrow transplants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New mouse Lpin1 and human LPIN1 genes associated with adiposity/insulin response regulation, useful for screening agents that alter adipose tissue development, or for diagnosing a predilection to lipodystrophy,
                                                                                                                                                                                                                                  malignant cells from bone marrow transplants. AAZ25812-Z26825 represent human polymorphic sites described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; LPIN1; chromosome 2p21; lipin 1A; adipocyte maturation; adipocyte metabolism; adipose tissue development; transgenic animal; diagnosis; drug screening; fat accumulation inhibition; lipodystrophy; obesity; diabetes; atherosclerosis; insulin response; antilipaemic; anorectic; antidiabetic; antiarteriosclerotic; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                   Gaps
The inhibitor is
                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                         Score 14.8; DB 1; Length 21;
Pred. No. 7.18+02;
0; Mismatches 2; Indels
   subject to loss of heterozygosity (LOH) in a cancer.
                                                                                                                                                                                                                                                                                           Sequence 21 BP; 7 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human LPIN1 gene PCR primer, SEQ ID NO:9.
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                                                                                                                                                                                                                                                                                                                                                                                                           991 CAGAACCTGCTCAAC 1008
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-DEC-2000; 2000US-0257772P.
                                                                                                                                                                                                                                                                                                                                     0.8%;
                                                                                                                                                                                                                                                                                                                                                    88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADG27367 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-FEB-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    obesity or diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-599767/64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peterfy M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200259248-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-AUG-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADG27367;
                                                                                                                                                                                                                                                                                                                                        Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 602
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Gaps

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The invention relates to mouse Lpinl and human LPIN1 nucleic acids (ADG27386-ADG27387) and the proteins they encode (ADG27361-ADG27363). The Lpin1/LPIN1 gene encodes a novel nuclear protein called lipin 1, which is highly expressed in adipocytes and plays a key role in adipocyte maturation and metabolism. In mice, mutations in the Lpin1 gene are responsible for the fatty liver dystrophy phenotype (fld) which exhibits characteristics of human lipodystrophy. Lipin 1 proteins, and the related

This invention describes a novel method for identifying an inhibitor potentially useful for treatment of cancer, where the inhibitor is active on a gene vital for cell growth or viability, and where the gene is

Disclosure, Fig 7; 605pp; English.

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proteins encoded by the Ipin2 and Ipin2 genes, contain two strongly conserved regions designated N-terminal and C-terminal lipin (NIIP and CLIP) domains. The invention also encompasses a method of screening for agents which modulate lipin 1 activity or expression, thereby altering adipose tissue development, a transgenic animal that lacks a functional confibin 1 protein; a method of identifying a predisposition to developing one or more symptoms of lipodystrophy, obesity, diabetes or atherosclerosis, a method of mitigating a symptom of lipodystrophy, coesity, diabetes, atherosclerosis, or related pathology by modulating lipin 1 activity or expression. The Lipin 1 nucleic configuration in a configuration of lipin 1 activity or expression. The Lipin 1 nucleic acid are useful for screening agents that alter adipose tissue confeveloping one or more symptoms of lipodystrophy, obesity, diabetes or atherosclerosis. Agents which modulate lipin 1 activity or expression are useful for inhibiting fat accumulation in a mammal, or for regulating adiposity and insulin response. The present sequence is related to the invancion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 6 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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ch 0.8%; Score 14.8; DB 1; Length 21; 1 Similarity 88.9%; Pred. No. 7.1e+02; 16; Conservative 0; Mismatches 2; Indels 1466 m 1449 ACATCCATTCTTCCTCAG 20 ACATTCATTCTGCCTCAG Best Local Similarity Matches à d

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Gaps

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ABZ76238 standard; DNA; 21

BP.

(first entry) 12-JUN-2003

Murine chemokine receptor CCR1 specific RT-PCR reverse primer.

CCR1; renal fibrosis; chemokine receptor; antiinflammatory; nephrotropic; collagen; mouse; RT-PCR; primer; ss.

Mus sp.

WO2003013656-A2.

20-FEB-2003

05-AUG-2002; 2002WO-US024763.

07-AUG-2001; 2001US-0310538P. 26-JUL-2002; 2002US-00205713.

(SCHD) SCHERING AG

Horuk R;

WPI; 2003-278443/27.

Composition for treating progressive renal fibrosis comprises non-peptide chemokine CCR1 receptor antagonist, especially arylmethylpiperazine derivative.

Example 6; Page 23; 43pp; English.

The invention relates to a composition for treating progressive renal fibrosis in mammals (preferably humans) and involves a non-peptide chemokine CCR1 receptor antagonist. The compositions are useful for treating progressive renal fibrosis in humans and in cats, dogs, cattle, sheep, goats, horses and rabbits. Sequences ABZ76211-245 represent oligonucleotide primers and probes used in an in vivo assay of chemokine receptor and collagen I mRNA expression

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Gaps

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Score 14.8; DB 1; Length 21; Pred. No. 7.1e+02; 0; Mismatches 2; Indels

ch 0.8%; 1 Similarity 88.9%; 16; Conservative

Query Match Best Local Similarity Matches 16; Conserv

Sequence 21 BP; 3 A; 5 C; 10 G; 3 T; 0 U; 0 Other;

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This invention relates to novel isolated nucleic acid molecules, and encoded proteins thereof, for epothilone B hydroxylase (ebh).

Specifically, it refers to recombinant microcorganisms expressing ebh, mutants and/ or ferredoxin, which are capable of hydroxylating small corganic molecule compounds i.e. epothilone. Epothilones are macrolide compounds produced by Sorangium cellulosum, which have been shown to exert microtubule stabilising effects similar to paclitaxel such that they have cytotoxic activity against rapidly proliferating cells. Accordingly, they are natural anticancer agents with neuroprotective, virucidal, antinflammatory and osteopathic activities. The present invention describes epothilones and analogues thereof as useful for treating cancers, inhibiting angiogenesis and treating blindness related to retinal vascularisation. Furthermore, they can be used for conditions including aplastic anaemia, restenosis, Alzheimer's disease, systemic luques erythmatosis and AIDS. This oligonucleotide sequence (SeqID II) is derived from a bacterial cytochrome P450 gene (locus STMSUACB) and used to design PCR primers P450-2- for the amplification of genomic epothilone B hydroxylase DNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 eph
                                                                                                                                                                                                                                                                                                                                                               Bacterial cytochrome P450 oligo used to design PCR primers (SeqID 11).
                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                 epothilone B hydroxylase; ebh; macrolide; microtubule stabilising; cytocoxic; anticancer; neuroprotective; virucidal; antiinflammatory; osteopathic; cancer; angiogenesis; retinal vascularisation; applastic anaemia; restencis; Alzheimer's disease; systemic lupus erythmatosis; Alzheimer's disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel epothilone B hydroxylase polypeptide, and mutants of the polypeptide which is useful for producing a epothilone analog.
                                                          Length 21;
                                                                                              2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Li Y;
               Sequence 21 BP; 2 A; 7 C; 4 G; 8 T; 0 U; 0 Other;
                                                       0.8%; Score 14.8; DB 1;
88.9%; Pred. No. 7.1e+02;
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                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; SEQ ID NO 11; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nayeem A,
                                                                                                                                 871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (BRIM ) BRISTOL-MYERS SQUIBB CO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-DEC-2001; 2001US-0344271P.
                                                                                                                               854 ACAAGGACCTGAAGCAGT
                                                                                                                                                               21 ACAAGAGCCTGAAGCAGT
                                                                                                                                                                                                                                                        ADD15228 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chiang S,
                                               Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                              ADD15228;
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Indels

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0; Mismatches

Conservative

16;

Matches

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The invention relates to a double-stranded short interfering nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    that responds to modulation of gene expression or activity in a cell, tissue or organism. The disease or condition may include pulmonary diseases such as restenosis, atherosclerosis, Albreimer's disease, Parkinson's disease, epilepsy, dementia, huntington's disease or amyotrophic lateral sclarosis. Furthermore, the siNA may be utilised for gene therapy applications. The current sequence is that of the siNA DNA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New double-stranded short interfering nucleic acid molecule, useful for down-regulating the expression of an endogenous mammalian target gene or for treating diseases that respond to modulation of gene expression or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the invention demonstrates antiarteriosclerotic, neuroprotective, nootropic, antiparkinsonian and anticonvulsant activities and may be useful for down-regulating the expression of an endogenous mammalian target gene and therefore in the treatment of any disease or condition
                                                                                                                                                                                                                                                double-stranded short interfering nucleic acid; siNA; antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian; anticonvulsant; pulmonary disease; restenosis; atherosclerosis; Alzheimer's; Parkinson's; epilepsy; dementia; huntington's; amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; CDK2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 5 A; 4 C; 4 G; 2 T; 6 U; 0 Other;
                                                                                                                                                                                                                     CDK2-targeted sina DNA-RNA hybrid - SEQ ID 301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 24; SEQ ID NO 301; 593pp; English.
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man N, Thompson J;
1218 CACGGTGGAGGAACAGCT 1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SIRN-) SIRNA THERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
                            cececresassascreci 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-FEB-2003; 2003WO-US005028
                                                                                                                  ADG29735 standard; RNA; 21
                                                                                                                                                                                      (first entry)
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Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-731676/69.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                               Unidentified.
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05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     L1-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JUN-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mcswidgen
                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    activity
                                                                                                                                                      ADG29735;
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                                                                                                      ADG29735/
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Fosnaugh K;

Pavco P,

Chowrira B,

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The invention relates to a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene comprising one or more chemical modifications and each strand of the double-stranded siNA comprises about 21 nucleotides. The siNA of nootropic, antiparkinsonian and anticonvulsant activities and may be useful for down-regulating the expression of an endogenous mammalian target gene and therefore in the treatment of any disease or condition that responds to modulation of gene expression or activity in a cell, tissue or organism. The disease or condition may include pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New double-stranded short interfering nucleic acid molecule, useful for down-regulating the expression of an endogenous mammalian target gene or for treating diseases that respond to modulation of gene expression or activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diseases such as restenosis, atherosclerosis, Alzheimer's disease, Parkinson's disease, epilepsy, dementia, huntington's disease or amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for gene therapy applications. The current sequence is that of the siNA DNA-
                                                                                                                                                                                                                                                         antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian; anticonvulsant; pulmonary disease; restenosis; atherosclerosis; Alzheimer's; Parkinson's; epilepsy; dementia; huntington's; amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; CDK2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fosnaugh K;
                                                                                                                                                                                                                                              double-stranded short interfering nucleic acid; siNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 6 A; 4 C; 4 G; 2 T; 5 U; 0 Other;
                                                                                                                                                                                                               CDK2-targeted sinA DNA-RNA hybrid - SEQ ID 297.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 24; SEQ ID NO 297; 593pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Beigelman L, Chowrira B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Thompson J;
1022 TCAAGCTGGCTGACTTTG 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SIRN-) SIRNA THERAPEUTICS INC
                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002US-0363124P.
2002US-0386782P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-FEB-2003; 2003WO-US005028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0358580P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0409293P
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                                18 TCAAGCTAGCAGACTTTG
                                                                                                                  21
                                                                                                                                                                                  (first entry)
                                                                                                                ADG29731 standard; RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-731676/69
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Jamison S, l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-2002;
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                                                                                                                                                                                                                                                                                                                                                     Unidentified
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                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                   ADG29731;
                                                                                   RESULT 606
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0.8%; Score 14.8; DB 1; Length 21;

Query Match

Score 14.8; DB 1; Length 21; Pred. No. 7.1e+02;

0.8%;

Query Match Best Local Similarity

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                  Gaps
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Pred, No. 7.16+02;
                            1022 TCAAGCTGGCTGACTTTG 1039
              5;
       61.18;
             Conservative
     Best Local Similarity
             Matches
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UCAAGCUAGCAGACUUUG 19

RESULT 607 ADJ97606/

ADJ97606 standard; DNA; 21

ADJ97606;

BP.

(first entry) 06-MAY-2004

Human Flt-1 DNA sequence, a target for siRNA inhibition SeqID 379.

age-related macular degeneration; inflammatory disease; psoriasis; rheumatoid arthritis; cancer; breast; retinoblastoma; Wilm's tumour; lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory; human, ss, short interfering RNA; siRNA; angiogenesis, vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1; Flk-1/KDR; kinase domain region; diabetic retinopathy; antipsoriatic; antirheumatic; antiarthritic.

Homo sapiens.

WO2004009769-A2.

29-JAN-2004.

.8-JUL-2003; 2003WO-US022444

24-JUL-2002; 2002US-0398417P

14-NOV-2002; 2002US-00294228

(UYPE-) UNIV PENNSYLVANIA.

Tolentino MJ, Reich SJ;

WPI; 2004-203472/19.

Novel short interfering RNA (siRNA) comprises sense and antisense RNA strands, useful for inhibiting expression of human vascular endothelial growth factor mRNA, for treating angiogenic disease, e.g. diabetic retinopathy and cancer.

Disclosure; SEQ ID NO 379; 218pp; English.

This invention relates to novel compositions that comprise short interfering RNA (siRNA) molecules, which can be used to inhibit or angiogenesis. Specifically, it refers to siRNAs that target and cause RNA-induced degradation of mRNA from human vascular endothelial growth factor (VEGF), the VEGF receptor (FIL-1) and the FIR-1/KDR (kinase domain cegion) genes, as well as mutants derived thereof. The present invention describes sense and antisense RNA strands that form an RNA duplex and bind to the target mRNA, such that expression is inhibited and the target of bind to the target mRNA, such that expression is inhibited and the target search, siRNA administered in combination with a therapeutic agent is useful for treating diseases associated with angiogenesis and related macular degeneration, inflammatory disease, psoriasis and the overexpression of VEGF, which include diabetic retinopathy, agenthemmatoid archritis. Furthermore, it can be used to treat various cancers including breast, retinoblastoma, Wilm's tumour and lymphoma. Accordingly, these compositions exhibit cytostatic, antidiabetic, ophthalmological, antidiammatory, antipsoriatic, antidiabetic antiarthritic activities. This oligonucleotide is a human FIt-1 DNA very

Sequence 21 BP; 10 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

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0.8%; Score 14.8; DB 1; Length 21;
88.9%; Pred. No. 7.1e+02;
Query Match
Best Local Similarity
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Gaps

; 0

0.8%; Score 14.8; DB 1; Length 21; 88.9%; Pred. No. 7.1e+02; ve 0; Mismatches 2; Indels

Query Match 0.8%; Best Local Similarity 88.9%; Matches 16; Conservative

Sequence 21 BP; 2 A; 6 C; 8 G; 5 T; 0 U; 0 Other;

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The invention relates to a method of designing primers for simultaneous amplification of target DNA fragments in a single multiplex polymerase comparises: (a) aligning a first primer and a second primer; The method comprises: (a) aligning a first primer and a second primer; and (b) selecting the first primer and a second primer; and (b) contain four or more bases that are perfectly matching to the 3' end cosn not contain four or a second primer, the first primer at its 3' end does not contain seven or more bases that are perfectly matching cexcept one mismatch to the 3' end sequence of the first primer at its 3' end does not contain six or more bases that are perfectly matching to second primer, the first primer at its 3' end does not contain six or more bases that are perfectly matching to a sequence anywhere of the first primer or the second primer, and the first primer at its 3' end does not contain eleven or more bases that are perfectly matching to one mismatch to a sequence anywhere of the first primer or the second contain eleven or more bases that are perfectly matching contain eleven or more bases that are perfectly matching contain eleven or more bases that are perfectly matching contain eleven or more bases that are perfectly matching contain eleven or more bases that are perfectly matching contain eleven or more bases that are perfectly matching end contain eleven or more bases that are perfectly matching end contain eleven or more bases that are perfectly matching end contain eleven or the second contain reaction. It is also useful in the identification of genetic chain reaction, the studies in pharmacogenetic reactions, the genotyping technologies. This sequence corresponds to an example of a primer of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Designing primers for simultaneous amplification of target DNA fragments in a single multiplex polymerase chain reaction, for high throughput multiplex DNA sequence amplification, comprises aligning two primers.
                                                                                                                                                                                                                                                                                                                                                                ss; primer; simultaneous amplification; single multifactorial disease; single multiplex polymerase chain reaction; multifactorial disease; genetic alteration; pharmacogenetic reaction; genotyping; polymorphism;
      Gaps
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    Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYNE-) UNIV NEW JERSEY MEDICINE & DENTISTRY.
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 41; 120pp; English.
                                                                                                                                                                                                                                                                                                                          Single multiplex PCR primer #1754.
                                                                                    ٣
                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-OCT-2003; 2003WO-US031874.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-OCT-2002; 2002US-0417009P
                                                               20 ATTTCCATATTTGCAGTA
                                        1501 ACTICCATATITGCACTA
                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                       gene expression profiling
Conservative
                                                                                                                                                                                            ADO12382 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-340914/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2004033649-A2.
                                                                                                                                                                                                                                                                                   15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Li J;
16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                   608
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Li H,
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AAT92763 standard; DNA; 22 BP.

RESULT 610

AAT92763

AAT92763;

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transcribed by the sequence represented in AAT02479. This sequence is a transcribed by the sequence represented in AAT02479. This sequence is a sense primer corresponding to a region of domain D of the retinoid X receptor (RXR) beta gene and was used as a control. The DNA was obtained from transgent mice that had a mutation in the RXR alpha gene. RXR is a from transgent mice that had a mutation in the RXR alpha gene. RXR is member of the steroid/thyroid receptor superfamily. By mutating the DNA binding domain sequence in one of the steroid/thyroid receptors (e.g. the binding domain sequence) of a mouse, a transgenic mouse expressing less than retinoid X receptor) of a mouse, a transgenic mouse expressing less than cations and the role of members of the steroid/thyroid receptor can determining the role of members of the steroid/thyroid receptor can superfamily in development and physiology. RXR-alpha-deficient mice created in this manner allow for molecular dissection of ventricular chamber development. The mice are also useful for determining the can be used for treating cardiac hypertrophy,
                                                                                                                                                                                                                                                                               Steroid/thyroid receptor superfamily; DNA-binding domain; transgenesis; retinoid X receptor; transgenic mouse; development; physiology; therapy; RXR-alpha-deficient; ventricular chamber development; ischaemia; RXR; cardiac hypertrophy; polymerase chain reaction; primer; amplify; PCR; reverse transcriptase; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Transgenic mice expressing low levels of steroid-thyroid receptors - useful for study of role of steroid-thyroid receptors in embryogenesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.8; DB 1; Length 22;
18.9%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                   Primer for domain D of the retinoid X receptor beta gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 22 BP; 2 A; 11 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ischaemia and other cardiac malfunctions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                useful for study of role of steroid-the.g. RXR alpha in cardiac development.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SALK ) SALK INST BIOLOGICAL STUDIES. (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 4; Page 20; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chien KR;
406 TCTCCAGTGAGAGTGCGT 423
                                      4 rcrccagreagegregir 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.8%;
Best Local Similarity 88.9%;
                                                                                                                                       AAT02483 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94US-00241044.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95WO-US005870.
                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sucov HM, Evans RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1995-404109/51
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9530741-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-NOV-1995
                                                                                                                                                                                                                       13-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                              AAT02483;
                                                                                                     RESULT 609
                                                                                                                     AAT02483/c
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cused in the chimeric non-human animal of the invention. The chimeric non-human animal of the invention. The chimeric non-human animal of the invention. The chimeric non-human animal of the invention, preferably a mouse, contains a foreign chromosome(s) or chromosome fragment. The animal is produced by obtaining chromosome(s) or chromosome fragment. The animal is produced by obtaining containing the lateral paying the ability to form microcells. The microcells are contained the ability to form microcells. The microcells are crown containing the foreign chromosome with calls having differentiative pluripotency and containing the foreign crownsome. These cells are then introduced into an embryo, which is then contained and brought to term. The foreign chromosome segment is at least implanted and brought to term. The foreign chromosome segment is at least chromosome segment could also contain genes associated with human chromosome segment could also contain genes associated with human contains a tree in the expression of foreign genes (especially human genes) in a non-human animal is useful for efficient production of proteins, especially corpuss the foreign genetic material can be isolated and fused with my my contain genes (especially contains animal subside contain are calls of the chimeric animal which corpus contains are supported and fused with my contains calls to produce hybridomas capable of expressing the foreign centering contains capable of expressing the foreign
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             o,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT92758-T92817 represent amplification primers for human genes which are
                                                                                                            PCR primer; amplify; human gene; chimeric non-human animal; antibody; transgenic mouse; chromosome fragment; hybridoma production; microcell; Huntington's disease gene; pluripotent cell; interleukin-2 gene; myeloma cell; immunoglobulin; variable region; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chimeric animal containing foreign chromosome - for expression of a foreign gene, e.g. an antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
                                                                       Primer #2 for immunoglobulin kappa variable region Vkappa3-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.8; DB 1; Length 22;
89.9%; Pred. No. 7.4e+02;
ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oshimura M, Ishida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 21; 142pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           356 CTGATGGGGAGAGTGACC 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                95JP-00242340.
96JP-00027940.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 CTGATGGTGAGAGTGAAC
                                                                                                                                                                                                                                                                                                                                                                            96WO-JP002427.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
                                       05-FEB-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ľomizuka K, Yoshida H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KIRI ) KIRIN BEER KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1997-178822/16.
                                                                                                                                                                                                                                                                                           WO9707671-A1.
                                                                                                                                                                                                                                                                                                                                                                              29-AUG-1996;
                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                     29-AUG-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                             15-FEB-1996;
                                                                                                                                                                                                                                                                                                                                       06-MAR-1997.
                                                                                                                                                                                                                                   Synthetic
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8
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ADG77192 standard; DNA; 22 BP.

RESULT 611

0;

Gaps

; 0

2; Indels

0; Mismatches

31 CAGAGGTAGGCAGGAGGA 48

16; Conservative

Matches

ð g

22 CAGAGGTAGGGAGGAGAA

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ADG77192

ax

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This invention relates to novel oligonucleotide PCR primers which may be used to identify markers associated with genetic diseases and traits in phose, in particular to diagnose genetic diseases that are not phenotypically visible and to identify carriers of recessive diseases. A specific application is diagnosis of copper toxicosis (CT). The invention can also be used to create a genetic map of the canine genome; to generate breed-specific profiles, to establish patternity and to identify dogs from DNA fingerprints. The method provides rapid analysis of the target sequences from only a small sample of DNA. Diagnosis can be done at any time in the dog's life. The present sequence is that of a PCR
                                                                                                                                                                                                                                                                                              New oligonucleotide primers for diagnosis of genetic diseases and traits in dogs - amplify specific regions of the genome containing microsatellite repeats, especially for diagnosing copper toxicosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pluripotent cell; intrinsic gene; chimeric non-human animal; construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.8; DB 1; Length 22;
Pred. No. 7.4e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 22 BP; 5 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Immunoglobulin kappa variable PCR primer Vk3-2 #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tomizuka K, Yoshida H, Hanaoka K, Oshimura M,
                                                                                                                                                                                                                           Yuzbasiyan-Gurkan V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1706 TGCCTACCTGCCTGAGCC 1723
                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 12; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22
                                                                                          97WO-US002396.
                                                                                                                              96US-0012060P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%;
                                                                                                                                                             (UNMI ) UNIV MICHIGAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98WO-JP000860.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5 receraacreacreaece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV52760 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-NOV-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            primer of the invention.
                                                                                                                                                                                                                           Venta PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KIRI ) KIRIN BEER KK
                                                                                                                                                                                                                                                              WPI; 1997-435082/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
             WO9731011-A1
                                                                                        18-FEB-1997;
                                                                                                                            22-FEB-1996;
                                                   28-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9837757-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-FEB-1997;
                                                                                                                                                                                                                           Brewer GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-SEP-1998
                                                                                                                                                                                                                                                                                                                                                           carriers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV52760;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV52760
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             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention relates to novel oligonuclectide PCR primers which may be used to identify markers associated with genetic diseases and traits in dogs, in particular to disgnose genetic diseases that are not phenotypically visible and to identify carriers of recessive diseases. A specific application is diagnosis of copper toxicosis (CT). The invention generate bread-specific profiles, to establish paternity and to identify dogs from DNA fingerprints. The method provides rapid analysis of the at any time in the dog's life. The present sequence is that of a PCR prime in the dog's life. The present sequence is that of a PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New oligonucleotide primers for diagnosis of genetic diseases and traits in dogs - amplify specific regions of the genome containing microsatellite repeats, especially for diagnosing copper toxicosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                            genetic disease; genetic trait; dog; carrier of recessive disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genetic disease; genetic trait; dog; carrier of recessive disease; copper toxicosis; CT; canine genome map; breed-specific profile; DNA fingerprint; dog identification; PCR; primer; ss.
                                                                                                                                copper toxicosis, CT; canine genome map; breed-specific profile; DNA fingerprint; dog identification; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.8; DB 1; Length 22; 88.9%; Pred. No. 7.4e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 22 BP; 5 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
                                                                       Canine disease marker-related PCR primer 36.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Yuzbasiyan-Gurkan V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Canine disease marker-related PCR primer 35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1706 TGCCTACCTGCCTGAGCC 1723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 12; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCCTAACTGACTGAGCC 22
                                                                                                                                                                                                                                                                                                          97WO-US002396
                                                                                                                                                                                                                                                                                                                                           96US-0012060P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                           (UNMI ) UNIV MICHIGAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88.98;
                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADG77191 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Brewer GJ, Venta PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1997-435082/40.
                                                                                                                                                                                         Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Canis familiaris
                                                                                                                                                                                                                           WO9731011-A1
                                                                                                                                                                                                                                                                                                        18-FEB-1997;
                                   11-MAR-2004
                                                                                                                                                                                                                                                                                                                                           22-FEB-1996;
                                                                                                                                                                                                                                                                  28-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-MAR-2004
ADG77192;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            carriers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADG77191;
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0

Gaps

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Ishida I;

RESULT

8 셤

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Producing a cell containing modified foreign chromosomes, useful for the
                                                                                                                                                                     Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                Primer Vk3-R for human immunoglobulin gene.
                                     Example 1; Page 33; 217pp; Japanese.
                                                                                                                                                                                                                                               AAA10007 standard; DNA; 22
                                                                                                                                                                                  Query Match
Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-246479/21.
    WPI; 1998-480821/41.
                                                                                                                                                                                                                                                                                                                             WO200010383-A1
                                                                                                                                                                                                                                                                                                                                                                           (KIRI ) KIRIN
                                                                                                                                                                                                                                                                                                                                                    23-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                               21-AUG-1998;
                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                      romizuka K,
                                                                                                                                                                                                                                                                      05-JUL-2000
                                                                                                                                                                                                                                                                                                                                         02-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                           Kuroiwa Y;
                                                                                                                                                                                                                                                          AAA10007;
                                                                                                                                                                                                                                     614
                                                                                                                                                                                                                                           AAA10007
                                                                                                                                                                                                                                     RESULT
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356 CTGATGGGGAGAGTGACC 373

CTGATGGTGAGAGTGAAC

20

ВР

(first entry)

0.8%; Score 14.8; DB 1; Length 22; 88.9%; Pred. No. 7.4e+02; iive 0; Mismatches 2; Indels

Ishida I;

Oshimura M,

Hanaoka K,

Yoshida H, BEER KK

99WO-JP004518. 98JP-00236169

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The invention relates to a novel method of producing cells containing a modified foreign chromosome or chromosome fragment. The method comprises:

(a) fusing a microcell comprising the foreign chromosome or chromosome fragment, with a cell having a high efficiency for homologous recombination; (b) marking the desired site of insertion of the foreign chromosome using a targeting vector; and (c) inducing deletion or translocation at the marked site. Transgenic animals produced by the method are useful to provide disease models and knockout animals, and in the production of human proteins, particularly human antibodies. This sequence is used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Foreign chromosome; microcell fusion; homologous recombination; antibody; targeting vector; transgenic animal; disease model; knockout animal;
                                                                                  The invention relates to a novel method of producing cells containing a modified foreign chromosome or chromosome fragment. The method comprises:

(a) fusing a microcell comprising the foreign chromosome or chromosome fragment, with a cell having a high efficiency for homologous recombination; (b) marking the desired site of insertion of the foreign chromosome using a targeting vector; and (c) inducing deletion or translocation at the marked site. Transgenic animals produced by the method are useful to provide disease models and knockout animals, and in the production of human proteins, particularly human antibodies. This sequence is used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Producing a cell containing modified foreign chromosomes, useful for the generation of transgenic animals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Primer 2 for human immunoglobulin kappa variable region gene Vk3-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
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                                                                                                                                                                                                                                                                                                                                                                                                                       Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ishida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oshimura M,
                                                                                                                                                                                                                                                                                                                                                                     Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                       Score 14.8; DB 1;
Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                 Example 95; Page 180; 316pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1, Page 55; 316pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hanaoka K,
generation of transgenic animals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            356 CTGATGGGGAGAGTGACC 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 crearegreadacreaac 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
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                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.8%;
Best Local Similarity 88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA09923 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUL-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Yoshida H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (KIRI ) KIRIN BEER KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-246479/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200010383-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tomizuka K,
Kuroiwa Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-MAR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA09923;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA09923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
       ठ
                                                                                                                                                                                                                    The present invention describes a method of obtaining pluripotent cells containing foreign chromosomes or their fragments (preferably at least containing foreign chromosomes or their fragments (preferably at least cf)0 kb in length, especially more than 1000 kb) by preparing cancerous cells containing the foreign chromosomes or fragments, then fusing these with pluripotent cells such as embryonic stem cells, embryonic cancer cells or their mutants. Also described are: (1) a method of obtaining hybridoma cells by fusing a cell with a high ability to produce hybridoma cells (such as mouse A9 cells) with a cell containing the foreign chromosomes or fragments (such as mice) which can express the foreign chromosomes or fragments to produce chimeric and transgenic non-human animals (especially mammals such as mice) which can express the foreign chromosomes or fragments or introduced; and (3) chimeric animals, their offspring an ethod as in (2). The cells derived from the offspring production of monoclonal antibodies for medical use which are of human type and therefore not antigenic in chumans. They can also be used in the production of chimeric and contained by the spress useful foreign proteins, or which can express useful foreign proteins, or which can serve as models for the study of human diseases. AAV52755 to AAV52828 are containing the samples from the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Foreign chromosome; microcell fusion; homologous recombination; antibody; targeting vector; transgenic animal; disease model; knockout animal; PCR primer; human; ss.
                                                                                  containing foreign chromosomes or fragments - and non-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                     human chimeric animals constructed using them and expressing foreign genes such as human antibiotic genes
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Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide primers, and the sequences of regions flanking stress primer extension (SNPB) primers, and the sequences of regions flanking stress of single nucleotide polymorphisms SNPS. The present invention includes Kits for determining the presence or absence of a SNP, using the oligonucleotides of the invention. The PCR primers are used to amplify a SNP flanking sequence, the SNPB primer is used as a genotyping primer. The oligonucleotides are useful for genotyping a nucleic acid sample by electroming a single-nucleotide primer extension reaction. The cligonucleotides are useful for determining the presence, absence or identity of a SNP and for genotyping nucleic acid samples, for e.g. to assess by association analysis the genotype of an individual or group of individuals, having a pathological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. of agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, familial hypercholesteroleamia, polycystic kidney disease, osteogenesis imperfecta and acute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial diseases, including, rheumatoid arthritis, multiple sclerosis, cancer, nervous system diseases and infection by pathogenic microorganism. The method is also useful in forensic investigations and paternity analysis. The present sequence represents a PCR primer specific for a human SNP containing DNA sequence
                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                         Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; nucscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                         Gaps
                                                                                      .;
0
                                            Length 22;
                                                                                    Indels
                                        Score 14.8; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 2;
Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                       SNP specific lower PCR primer SEQ ID 2062.
                                                                                                                        356 CTGATGGGGAGAGTGACC 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 60; 83pp; English.
                                                                                                                                                               3 crcarcercacacrcaac 20
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                                                                                                                                                                                                                                                                      BP.
                                          0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-OCT-2000; 2000WO-US028436.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-0160096P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pohl M;
                                                                                                                                                                                                                                                                  AAH39266 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                 (first entry)
                           Cuery Match
Best Local Similarity 88.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-290930/30.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200129262-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-0CT-1999;
                                                                                                                                                                                                                                                                                                                                                 14-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acid sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-APR-2001.
                                                                                                                                                                                                                                                                                                           AAH39266;
                                                                                                                                                                                                                          RESULT 616
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                                                                                                                                                                                                                                             AAH39266
ID AAH3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytostatic; antidiabetic; anorectic; metabolic; nootropic; antilipaemic; neuroprotective; antiparkinsonian; anticonvulsant; cerebroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of human chromosomes 14 and 22. The chimeric mouse carries the complete human antibody heavy chain gene from chromosome 14 and the light chain lambda gene from chromosome 22. The present sequence is a PCR primer, which was used in an example from the present invention
                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Non-human animals maintaining a modified alien chromosome or its
                                                                    .
0
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0
                                     Score 14.8; DB 1; Length 22;
Pred. No. 7.4e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.8; DB 1; Length 22;
88.9%; Pred. No. 7.4e+02;
ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                           PCR primer; chimeric mouse; chromosome 14; chromosome 2; antibody heavy chain gene; light chain lambda gene; ss.
            Sequence 22 BP; 3 A; 7 C; 2 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NOVX reverse PCR primer SEQ ID No 246.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 9; Page 18; 43pp; Japanese.
                                                                                            1743
                                                                                                                     22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     356 CTGATGGGGAGAGTGACC 373
                                                                                                                                                                                        BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                 18-FEB-2000; 2000JP-00042074.
                                                                                                                                                                                                                                                                                                                                                                                                                                            18-FEB-2000; 2000JP-00042074.
                                     ch 0.8%;
1 Similarity 88.9%;
16; Conservative
                                                                                          1726 GTTCACCTGCCCACTTGT
                                                                                                                   s Gricacriscoccacriri
                                                                                                                                                                                    AAI71720 standard; DNA; 22
                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABT05572 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KIRI ) KIRIN BREWERY
                                                                                                                                                                                                                                                                  PCR primer Vkappa3-R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-609926/70.
                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                              JP2001231403-A.
                                                                                                                                                                                                                                         15-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                       28-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-OCT-2002
                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                               AAI71720;
                                     Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABT05572;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fragment
                                                                                                                                                            RESULT 617
                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
XX SS
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anti-HIV; antiallergic; antirheumatic; antiarthritic; NOVX; diabetes; metabolic disorder; obesity; infectious disease; Alzheimer's disease; anorexia; neurodegenerative disorder; Parkinson's disorder; obesity; immune disorder; haematopoietic disorder; dyslipidaemia; chronic disease; metabolic syndrome X; wasting disorder; darlor; neurological disorder; epilepsy; stroke; mental disorder; schizophrenic disorders; goiter; vesicular transport; oystic fibrosis; gastrointestinal disorder; diabetes mellitus; ulcerative colitis; AIDS; allergic reaction; multiple sclerosis; theumatoid arthritis; transgenic animal; gene therapy; PCR; primer; ss. tranquiliser; neuroleptic; antidiabetic; antiulcer; antiinflammatory;

Unidentified.

WO200246409-A2.

13-JUN-2002

06-DEC-2001; 2001WO-US046586

06-DEC-2000; 2000US-0251660P. 12-DEC-2000; 2000US-0255029P. 08-JAN-2001; 2001US-0260326P. 24-JAN-2001; 2001US-0263800P. 20-FEB-2001; 2001US-0269942P. 24-AFR-2001; 2001US-031813P. 20-AUG-2001; 2001US-0313627P. 12-SEP-2001; 2001US-0313627P.

(CURA-) CURAGEN CORP.

Li L, Patturajan M, Shimkets RA, Casman SJ, Malyankar UM; vr VT, Vernet CAM, Spytek RA, Shenoy SG, Alsobrook JP; S. Peyman JA, Stone DJ, Ellerman K, Gangolli EA, Boldog FL; SD, Bisen AJ, Liu X, Padigaru M, Spaderna SK, Zerhusen BD; Malyankar UM; Tchernev VT, Vernet (Edinger S, Peyman JA, Colman SD, Eisen AJ, Guo X,

WPI; 2002-547774/58

Novel isolated polypeptide, designated NOVX, useful for treating opreventing cancer, diabetes, obesity, dyslipidemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders.

Example 2; Page 372; 421pp; English.

The invention relates to an isolated polypeptide, designated NOVX, comprising a sequence fully defined in the specification. The isolated protein, its encoding polynucleotide or an antibody created from the protein, its encoding polynucleotide or an antibody created from the protein is useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder in a subject, preferably human. The isolated protein, its encoding polynucleotide or an antibody created from the protein are also useful for treating or preventing metabolic disorders, diabetes, obesity, infectious disease, an onexia, neurodegenerative, haematopoletic disorders, and various dyslipidaemias, metabolic disturbances associated with obesity, the metabolic syndrome X, wasting disorders associated with obesity, the metabolic syndrome X, wasting disorders associated with obesity, the metabolic syndrome X, wasting disorders associated with chronic diseases, and cancer. The isolated protein, its encoding chronic diseases, and cancer. The isolated protein, its encoding colving or preventing metabolic syndrome X, wasting disorders associated with an antial disorders including mood, anxiety, schizophrenic disorders, metal disorders including mood, anxiety, schizophrenic disorders, disorders of vesicular transport such as cystic fibrosis, diabetes colities, other conditions associated with abnormal vesicle trafficking including AlDS, allergic reactions, multiple sclerosis and rheumatoid arthritis. A cell comprising the vector of the invention is useful for producing non-human transgenic animals. The polynucleotide of the invention can be used to treat disorders by gene therapy. This polynucleotide sequence represents a reverse PCR primer for the polynucleotide sequence represents a reverse PCR primer for the amplification of a sequence relating to the NOVX proteins of the

Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                              Human; NOVX; atherosclerosis; hypertension; obesity; cancer; cytostatic; hypotensive; antiarteriosclerotic; anorectic; gene therapy; NOV18; PCR;
                          Gaps
                          ..
                          2; Indels
  Length
Score 14.8; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 2;
                                                     1230 ACAGCTACACTTCATCTT 1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-MAR-2001; 2001US-027292P

02-MAR-2001; 2001US-0273048P

02-MAR-2001; 2001US-027304P

16-MAR-2001; 2001US-0276401P

20-MAR-2001; 2001US-027660P

30-MAR-2001; 2001US-0278660P

30-MAR-2001; 2001US-028034P

30-MAR-2001; 2001US-0280318P

12-APR-2001; 2001US-0280418P

23-APR-2001; 2001US-0281343P

24-APR-2001; 2001US-0281353P

13-MAY-2001; 2001US-0281353P

17-MAY-2001; 2001US-0298353P

17-MAY-2001; 2001US-0298354P

20-UUN-2001; 2001US-0298434P

21-UUN-2001; 2001US-0298434P

05-UUN-2001; 2001US-0298434P

05-UUN-2001; 2001US-0298434P

05-UUN-2001; 2001US-0298434P
                                                                                                                                                                                                                         SEQ ID 315.
                                                                                                                                                                                                                                                                                                                                                                                                                                           2001US-0272405P.
2001US-0272410P.
2001US-0272414P.
2001US-0272787P.
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2001US-0313280P.
  0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                26-FEB-2002; 2002WO-US005910
                                                                              18 ACAGCIGCGCTICATCTT
                                                                                                                                              ADH49031 standard; DNA; 22
                                                                                                                                                                                                25-MAR-2004 (first entry)
                Local Similarity 88.9
nes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                           NOV18 PCR primer,
                                                                                                                                                                                                                                                                                                                              WO200268652-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                               28-FEB-2001; 28-FEB-2001; 28-FEB-2001; 28-FEB-2001; 28-FEB-2001; 202-MAR-2001; 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-AUG-2001;
                                                                                                                                                                                                                                                                           primer; ss.
                                                                                                                                                                                                                                                                                                                                                       06-SEP-2002
                                                                                                                                                                        ADH49031;
      Query Match
                             Matches
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0
                                                                                                                  or
                                                                              The present invention relates to novel human NOVX proteins, where X is any number from 1 to 91 and their coding sequences (see ADH48717-ADH48930). The proteins and coding sequences are useful for preventing creating disorders or syndromes e.g. atherosclerosis, hypertension, obesity or cancer. The present sequence was used in an example from the invention.
                                                                                                                                                                                                                                                                                                                                                                                                           Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
                                                                                                                                                                                                                                                                                                                                                                                                                   hypertension, congenital heart defect; acttic stenosis; valve disease; atrial septal defect; atrioventricular canal defect; ductus arteriosus; pulmonary stenosis; subacrtic stenosis; ventricular septal defect; VSD; tubercous sclerosis; scleroderma; atherosclerosis; infectious disease; obesity; anorexia, neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; immune disorder; haematopoietic disorder; primer; haemophilia; hypercoagulation; Crohn's disease; cancer.
                                                                                                                                                                                                                    Gaps
                      New NOVX polypeptides or polynucleotides, useful for preventing or treating disorders or syndromes e.g., atherosclerosis, hypertension,
                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                           Score 14.8; DB 1; Length 22;
Pred. No. 7.4e+02;
                                                                                                                                                                                                                2; Indels
                                                                                                                                                                   Sequence 22 BP; 12 A; 4 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                 0; Mismatches
                                                                 Example 2; Page 649; 923pp; English.
                                                                                                                                                                                                                                     1524 GATTCAGCTACAAAAGGA 1541
                                                                                                                                                                                                                                                           3 GAAACAGCTACAAAAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-APR-2001; 2001US-0221135F.
05-APR-2001; 2001US-0221863P.
06-APR-2001; 2001US-0221806P.
10-APR-2001; 2001US-0282930P.
110-APR-2001; 2001US-0282934P.
12-APR-2001; 2001US-0283512P.
13-APR-2001; 2001US-0283510P.
17-APR-2001; 2001US-0283510P.
17-APR-2001; 2001US-028536P.
20-APR-2001; 2001US-0285381P.
                                                                                                                                                                                        0.8%;
                                                                                                                                                                                                                                                                                                                   ABX72335 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                                                                   Human NOVX DNA PCR primer #40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001US-0281086P.
2001US-0281136P.
2001US-0281863P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-APR-2001; 2001US-0285748P. 23-APR-2001; 2001US-0285890P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-APR-2001; 2001US-0286292P.
27-APR-2001; 2001US-0287213P.
02-MAY-2001; 2001US-0288257P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-APR-2002; 2002WO-US010780
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                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                   Local Similarity 88.5
 WPI; 2002-698672/75
                                             obesity or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200281498-A2
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24-APR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                              03-JUN-2003
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                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                             RESULT 620
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agents. The sequences are useful for treating metabolic disorders, cardiomyopathy, diabetes, hypertension, congenital heart defects, acrtic stenosis, atrial septal defect (ASD), atrioventricular canal defect, ductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular septal defect (VSD), valve diseases, tuberous sclerosis, sclerodera, atherosclerosis, obesity, infectious disease, anorexia, neurodegenerative disorders, Alzbeimer's disease, Parkinson's disease, immune disorders, haematopoletic disorders, haematopoletic disorders, haematopoletic disorders, haematopoletic disorders haematopoletic disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Burgess CE, Gerlach V; er RJ, Casman SJ, Ji W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to human polypeptides, termed NOVX, and the polynucleotides encoding them. The polypeptides and polynucleotides are useful for diagnosing disease, and screening for potential therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated NOVX polypeptide useful for treating atherosclerosis, metabolic disorders, diabetes, obesity, infectious disease, anorexia, neurodegenerative disorders, Alzheimer's disease and cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peyman JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
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88.9%; Pred. No. 7.4e+02;
Ive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Guo X, Kekuda R, Miller CE, Malyankar UM, Spytek Patturajan M, Liu X, Gusew VY, Li L, Vernet CAM, Gorman L, Shenoy SG, Pena CEA, Smithson G, Burgest Padigaru M, Shimkets RA, Gangolli EA, Taupier RJ, Anderson DW, Leite MW, Rastelli L, Edinger SR, Stc Macdougall JR, Rothenberg ME, Mazur A, Millet I, Ellerman K;
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18-JUN-2001; 2001US-0298952P.
19-JUN-2001; 2001US-029937P.
12-SEP-2001; 2001US-0299276P.
25-SEP-2001; 2001US-0314802P.
25-SEP-2001; 2001US-0324802P.
27-SEP-2001; 2001US-0325684P.
17-OCT-2001; 2001US-0330143P.
14-NOV-2001; 2001US-0332131P.
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21-NOV-2001; 2001US-0332115P.
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les 16; Conserv
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Lepley DM, Edinger SR,

Alzheimer's disease; Parkinson's disease; epilepsy; multiple sclerosis; schizophrenia; depression; autoimmune disorder; inflammatory disorder; portrasis; allergy; lupus erythematosus; asthma; cancer; inflammatory bowel disease; rheumatorid arthritis; osteoarthritis; colon cancer; lung cancer; liver cancer; breast cancer; ovarian cancer; prostate cancer; ovarian cancer; lung disease; emphysema; obstructive pulmonary disease; liver cirrhosis; stroke; infection; PCR; primer; ss.

Homo sapiens

WO2003023002-A2.

20-MAR-2003

09-SEP-2002; 2002WO-US028539

07-SEP-2001; 2001US-0318130P. 10-SEP-2001; 2001US-0318430P. 17-SEP-2001; 2001US-032265F. 17-SEP-2001; 2001US-0322816P. 17-SEP-2001; 2001US-0322816P. 2001US-0318120P 07-SEP-2001;

19-SEP-2001; 2001US-0323519P. 20-SEP-2001; 2001US-0323631P. 20-SEP-2001; 2001US-0323636P. 25-SEP-2001; 2001US-0324969P.

25-SEP-2001; 2001US-0325091P. 2002US-0373212P 2001US-0324990P 17-APR-2002;

(CURA-) CURAGEN CORP.

06-SEP-2002; 2002US-00236177

, Gorman L, Li L, Anderson DW, Zhong M; Ellerman K, Berghs C, Rothenberg ME, Guo X. Catterron E, Xekuda R, Ji W, Miller CE; Eneroy SG, Liu X, Padigaru M, Alsobrook JP; Burgess CE; Spytek KA, Patturajan M, Gerlach VL, Vernet CAM, Shimkets RA, Leach MD, C Rieger DK, Taupier RJ, S

Zhong M; Guo X;

WPI; 2003-313242/30.

New cytoplasmic, nuclear membrane bound or secreted polypeptides (NOVX) and polynucleotides, useful in gene therapy, e.g. for treating or preventing obesity, multiple sclerosis, allergy, cancers, hemophilia, stroke or infections.

Example 92; Page 465; 586pp; English.

The invention describes a new isolated polypeptide (NOVX). The NOVX polypeptide, nucleic acid and antibody are useful as therapeutics, polypeptide, nucleic acid and antibody are useful as therapeutics, particularly in the manufacture of a medicament for treating a syndrome associated with a human disease, which includes a pathology associated with NOVX polypeptide. The DNA encoding the protein is useful in gene therapy for treating the disease or condition. In particular, the NOVX polypeptide or polymeptide is useful for treating endocrine/ metabolism-related diseases (e.g. obssity or diabetes), central nervous system disorders (e.g. Alzheimer's disease, Parkinson's disease, cepilepsy, multiple sclerosis, schizophrenia or depression), autoimmune and inflammatory bowel disease, theumatoid arthritis or asthma, inflammatory bowel disease, theumatoid arthritis or osteoarthritis), cancers (e.g. colon, lung, liver, breast, ovarian, concers, or melanoma), liver diseases (e.g. liver cirrhosis), lung diseases (emphysema or obstructive pulmonary disease), chese are also useful in developing powerful assay system for functional analysis of various human disorders, as well as in diagnostic applications, and for monitoring the effects of drugs during clinical critils, this sequence represents a primer used to isolate DNA encoding novel human NOV proteins

Sequence 22 BP; 10 A; 7 C; 3 G; 2 T; 0 U; 0 Other;

un vitro diagnosis; inappropriate fibrosis; scarring; l6sRNA region;

W ND2 gene; NADH-quinone oxidoreductase; complex I; cytochrome b;

complex III region; COI gene; Cytochrome c oxidase; complex IV region;

M mitochondrial genome; antiinflammatory; vulnerary; dermatological;

m mitochondrial genome; antiinflammatory; vulnerary; dermatological;

W mitochondrial genome; solerosis; crest syndrome; tuberous sclerosis;

Scleroderma; systemic sclerosis; crest syndrome; tuberous sclerosis;

W skin patch; familial cutaneous collagenoma; skin metabolic disorders;

W mixed connective tissue disease; drug-induced skin fibrosis;

M mixed connective tissue disease; drug-induced skin fibrosis;

M cirrhosis; renal fibrosis; drug induced fibrosis; liver fibrosis;

W cartal nervous system fibrosis; peripheral nervous system fibrosis;

W vascular system fibrosis; glomerulomephritis; cystic fibrosis;

W synaecological fibrosis; glomerulomephritis; cystic fibrosis;

W neurodegenerative disorder; human; PCR; primer; ss. 0 Gaps Human fibrosis/scarring predisposition-related PCR primer SeqID36. .. 0 2; Indels Length Score 14.8; DB 1; Pred. No. 7.4e+02; 0; Mismatches 2 1417 ~ ADJ45837 standard; DNA; 22 BP 0.8%; 1400 TGTTGCAGTTTGAGGGTC 19 rerereactive agence 06-MAY-2004 (first entry) Conservative Query Match Best Local Similarity Matches 16; Conserv ADJ45837; RESULT 622 ADJ45837 ò 셤

L3-NOV-2003.

WO2003093506-A2 Homo sapiens.

23-APR-2003; 2003WO-GB001717.

30-APR-2002; 2002GB-00009812

(RENO-) RENOVO LTD.

Bayat A; Ferguson MWJ, Ollier WER,

WPI; 2004-022664/02.

In vitro diagnosing a condition due to inappropriate fibrosis or scarring, e.g. Dupuytren's disease by detecting polymorphism or mutation in the 16sRNA region, ND2 gene, cytochrome b region or COI gene of the mitochondrial genome.

Example 1; SEQ ID NO 36; 81pp; English.

detection of a predisposition to a condition characterised by inappropriate fibrosis or scarring comprising examining the 16sRuh inappropriate fibrosis or scarring comprising examining the 16sRuh region, ND2 gene of NADH—quinone oxidoreductase (complex I), cytochrome b (complex III) region or COI gene of Cytochrome c oxidase (complex IV) region of the mitochondrial genome to detect the presence of a genetic polymorphism or mutation linked to the development of the condition. The invention may be useful for the development of compositions with an antiinflammatory, vulnerary, dermatological or nephrotic activity. In addition, the sequences disclosed may prove useful for gene therapy. The method, kit or delivery may be useful for diagnosing or detecting or treating a predisposition to a condition characterised by inappropriate fibrosis or scarring. A modulator of mitochondrial genome gene products This invention relates to a novel method of in vitro diagnosis or

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is useful in the manufacture of medicament for treating a condition characterised by fibrosis or scarring. The condition is Dupuytren's disease, Keloid or hypertropic scar, scleroderima, systemic sclerosis, crest syndrome, tuberous sclerosis with skin patches, familial cutaneous collagenoma, metabolic disorders of the skin, eosinophilic fascitis, collagens, darqued skin fibrosis, mixed connective tissue disorder sylver fibrosis, central and environmental exposures, pulmonary/cardiac fibrosis, liver fibrosis, cand environmental exposures, pulmonary/cardiac fibrosis, and mean environmental exposures, granderd system candidate system fibrosis, glomerulonephritis, cystic fibrosis, scleroderma, myocardial fibrosis, fibrosis following myocardial infarction and central nervous system fibrosis following a stroke or neurodegenerative disorders. The present sequence is that of a PCR primer which was used for amplification of the human mitochondrial genome in the exemplification of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABC transporter; ATP-binding cassette; leucocyte; PCR; primer; ss; human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel primer set useful for detecting expression of ABC transporter gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
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Pred. No. 7.4e+02;
0; Mismatches 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTCTTTACGGACTCCAC 1
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                                                                                                                                                                                                                                                                                                                                                                                                            0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
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ADL71202/c
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Score 14.8; DB 1; Length 22; Pred. No. 7.4e+02;

0.8%;

Query Match Best Local Similarity

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                                                                                                                                                                                                                              ss; PCR; vernalisation independence polypeptide; VIP4; flowering regulation; flowering induction; cold response; vernalisation; transgenic plant; thale cress; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated nucleic acids encoding vernalization independence genes, useful for regulating flowering, e.g. induction of flowering in response to cold or vernalization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an isolated vernalisation independence polypeptide (VIP) operably linked to a promoter. The nucleic acids and the VIP polypeptides are useful for regulating flowering, particularly the induction of flowering in response to cold, or vernalisation. It can also be used to remove requirements for vernalisation in transgenic and to isolate homologous genes in other plants for similar use.
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  Gaps
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    Indels
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 Mismatches
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                                                                                                                                                                                                     Thale cress VIP4 probe PCR primer #3.
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                          1504 TCCATATTTGCACTAAAG 1521
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                                                                                                                                                                                                                                                                                                                                                                 01-MAY-2003; 2003US-00427224.
                                                                                                                                                                                                                                                                                                                                                                                             01-MAY-2002; 2002US-0376765P
                                              88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       666 AGGCAAAAGCAAGCTCAC
                                                                                                                       22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGCAAACACAAGCTCAC
                                                                                                                                                                          03-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-JUN-2004 (first entry)
 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                      ADM56137 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Van Nocker SR, Zhang H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADK13910 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                      (VNOC/) VAN NOCKER S R.
                                                                                                                                                                                                                                                                                    Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-180056/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                   (ZHAN/) ZHANG H.
                                                                                                                                                                                                                                                                                                             US2004033607-A1
                                                                                                                                                                                                                                                                                                                                        19-FEB-2004
                                                                                                                                                 ADM56137;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADK13910;
                                                                                              624
Matches
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                                                                                          RESULT 6
ADM56137
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neurodevelopmental diseases such as Rett syndrome, autism, non-syndromic mental retardation, idiopathic neonatal encephalopathy, idiopathic infantile spasms, idiopathic cerebral palsy, Angelman syndrome and schizophrenia. The present sequence represents a human methyl-CpG-binding protein 2, MECP2, PCR primer.
                                                                                                                                                                                                                                                                                                                                                   Screening human for Rett syndrome comprises detecting mutation in nucleic acid sequence encoding methyl-CpG-binding protein 2 (MECP2).
                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a method of screening a human for Rett syndrome comprising detecting a mutation in a nucleic acid sequence encoding methyl-CpG-binding protein 2 (MECP2). The method is useful for screening a human for Rett syndrome. The method is useful for screening
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             neurodevelopmental disease; autism; non-syndromic mental retardation; idiopathic infantile spasm; idiopathic infantile spasm; adiopathic cerebral palsy; Angelman syndrome; schizophrenia; ss; primer;
         human; Rett syndrome; methyl-CpG-binding protein 2; MECP2; neurodevelopmental disease; autism; non-syndromic mental retardation; idiopathic neonatal encephalopathy; idiopathic infantile spasm; idiopathic cerebral palsy; Angelman syndrome; schizophrenia; ss; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.8; DB 1; Length 22;
Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rett syndrome; methyl-CpG-binding protein 2; MECP2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human methyl-CpG-binding protein 2, MECP2, PCR primer #25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 2 A; 0 C; 13 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                          Francke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                          Zoghbi HY, Van Den Veyver IB, Amir R,
                                                                                                                                                                                                                                                                                                                                                                                                 Claim 3; SEQ ID NO 12; 125pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  245
                                                                                                                                                                                                                                                            (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%;
                                                                                                                                                                                                07-SEP-2000; 2000US-00657013.
                                                                                                                                                                                                                               99US-0152778P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 GAGIGGIGGIGATGGIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  228 GAGTGGTGGTGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADK13982 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 88.5
                                                                                                                                                                                                                                                                                                                         WPI; 2004-256068/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US6709817-B1
                                                                                                          Homo sapiens
                                                                                                                                                                                                                               07-SEP-1999;
                                                                                                                                     US6709817-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADK13982;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 626
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                                                                                                                                                                                     The invention relates to a method of screening a human for Rett syndrome comprising detecting a mutation in a nucleic acid sequence encoding methyl-CpG-binding protein 2 (MECP2). The method is useful for screening a human for Rett syndrome. The method is useful for screening neurodevelopmental diseases such as Rett syndrome, autism, non-syndromic mental retardation, idiopathic neonatal encephalopathy, idiopathic infantile spasms, idiopathic cerebral palsy, Angelman syndrome and schizophrenia. The present sequence represents a human methyl-CpG-binding protein 2, MECP2, PCR primer.
                                                                                                               Screening human for Rett syndrome comprises detecting mutation in nucleic acid sequence encoding methyl-CpG-binding protein 2\ (\text{MECP2}).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to a method for the locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles. The method is useful
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Reverse primer #24 used for amplification of HLA-A exon
                                                         Francke U;
                                                                                                                                                                                                                                                                                                                                             Sequence 22 BP; 2 A; 0 C; 13 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.8; DB 1;
88.9%; Pred. No. 7.4e+02;
ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HLA-A; HLA-B; HLA-C; typing; primer; human;
                                                         Amir R,
                                                                                                                                                               Claim 3; SEQ ID NO 84; 125pp; English.
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                            (BAYU ) BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                      228 GAGTGGTGGTGGTGCCGG 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 GAGTGGTGGTGATGGTGG 19
                                                         Van Den Veyver IB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99EP-00870068.
99US-0138614P.
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99US-0152778P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                         16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rombout A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (INNO-) INNOGENETICS NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-647426/62.
                                                                                       WPI; 2004-256068/24
                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC80112 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40200061795-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
 07-SEP-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
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                                                           zoghbi
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 for subtyping or typing of HLA class 1 alleles. The present sequence is an amplification primer used in the method
                                                                                                                                                                                                                                                                                                                                                                                       Human, cystic fibrosis transmembrane conductance regulator; CFTR; PCR; recombinant; expression; bacterium; homology; Pribnow box; TATA box; transcription; translation; truncation; site-directed mutagenesis; prokaryote; open reading frame; primer; amplification; ss.
                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified DNA sequence - derived from gene coding for cystic fibrosis trans:membrane conductance regulator protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a recombinant human cystic fibrosis
                                                                               0.8%; Score 14.6; DB 1; Length 20; 88.2%; Pred. No. 7.4e+02; ive 1; Mismatches 1; Indels
                                               Sequence 20 BP; 1 A; 9 C; 6 G; 3 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 7 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                          Human CFTR gene upstream 5' mutagenic primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig 7; 36pp; English.
                                                                                                                                              249 IGACCTGGAGGGCC 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     89US-00396894.
89US-00399945.
89US-00401609.
90GB-00020632.
                                                                                                                                                                            20 TGHCCCGGGAGAGGCCC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96US-00604488
                                                            Dury Match BB.2%, Best Local Similarity 88.2%, Best Local 5, Conservative
                                                                                                                                                                                                                                                             AAX04445 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HSCR-) HSC RES & DEV LP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rommens JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1992-150482/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                            11-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-FEB-1996;
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21-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-APR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US5863770-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-AUG-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-AUG-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-JAN-1999
                                                                                                                                                                                                                                                                                            AAX04445;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
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                                                                                                                                                                                                                               RESULT 628
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The sequences given in AAQ36670-78 are primers which were used in the isolation and cloning of the polyphenol oxidase (PPO) enzyme genes from various plants. The PPO genes were isolated, and recombinant plasmids for transformation of plant cells were produced by PCR using these primers. PPO is thought to be the predominant catalyst in browning of fruit caused by injury or damage. PPO is localised in the plastids of fault cells whereas the phenolic substrates of the enzyme are stored in the plant cells whereas the phenolic substrates of the enzyme browning reation from couring unless the plant cells are damaged and the enzyme and the substrate are mixed. The PPO gene sequences could be used to construct synthetic genes which may be used to transform plants to decrease expression of the enzyme gene. In some instances, eg. coffee, tea, black oilves etc., it is desirable to increase the level of PPO to produce colives etc., it is desirable to increase the level of PPO to produce colives etc., it is desirable to increase the level of PPO to produce colives etc., it is desirable to increase the level of PPO to produce colives for an additional 103 amino acids upstream of the N-terminum of the mature protein. This region has the properties of a chloroplast transit peptide and is most likely responsible for targetting coff the protein to be imported into the chloroplast and processed to consult in accumulation of plants with this gene may therefore could in accumulation of active grapevine PPO in other species and result in accumulation of active grapevine PPO in other companies.
                                                                                                                                                                                                                                                                                                                                         Polyphenol oxidase; PPO; catalyst; browning; fruit; plastid; vacuole; transform; coffee; tea; black olives; grapevine; chloroplast; apple; transit peptide; recombinant plasmid; PCR; primer; amplify; broad bean; potaco; polymerase chain reaction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA encoding polyphenol oxidase polypeptide or fragment - useful for modifying the oxidase activity in fruit and vegetables to decrease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 5 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CSIR ) COMMONWEALTH SCI & IND RES ORG.
1530 GCTACAAAGGAGGCCAGCCT 1550
                                        1 GCTACCAAAGCAGTACAGCCT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 20; Page 24; 44pp; English.
                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92WO-AU000356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91AU-00007248.
                                                                                                                                                AAQ36678 standard; cDNA; 21
                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                       (revised)
                                                                                                                                                                                                                                                                                                   Potato PPO primer #4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Robinson SP, Dry IB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1993-058792/07.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-JUL-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-FEB-1993.
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                                                                                                                                                                                                                                                         09-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                           AAQ36678;
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Gaps ..

0.8%; Score 14.6; DB 1; Length 21; larity 81.0%; Pred. No. 7.7e+02; Conservative 0; Mismatches 4; Indels

0;

Gaps

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0.8%; Score 14.6; DB 1; Length 21; 31.0%; Pred. No. 7.7e+02; ive 0; Mismatches 4; Indels

81.0%;

Conservative

Local Similarity nes 17; Conserv

Best Loca Matches

Query Match

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WPI; 1995-215278/28
                                                                                                                                       05-DEC-1994;
                                                                                                                                                            03-DEC-1993;
                                                                                            WO9515400-A1
                                                                                                                  . 3661-NUL-80
                                                                                                                                                                                                     Levitt RC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                       Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    The sequences given in AAQ45198-200 and AAQ61687-777 are primers which were used in the isolation and amplification of the genomic sequence of the hepatitis E virus (HEV) strain SAR-55. These primers were based on sequences derived from the SAR-55 strain and a strain from Burma (BUR-121). The amplified sequence contains three open reading frames (ORFs). The proteins encoded by this sequence can be used to stimulate the production of protective antibodies upon injection into a mammal that would serve to protect the mammal upon challenge with wild type HEV. The proteins can be used for detection and diagnosis of HEV infection. This cDNA was isolated from primates innoculated with stool suspensions
                                                                                                                                                                                                                                                                                                                                                                                 .....eu mepatitis E strain SAR-55 virus - used to develop prods. for use in detection, diagnosis, vaccines and therapy of hepatitis E virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                      Hepatitis E virus; HEV; strain SAR-55; open reading frame; ORF; PCR; antibody; detection; diagnosis; primates; stool suspension; amplify; polymerase chain reaction; primer; burma; strain BUR-121; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.8%; Score 14.6; DB 1; Length 21; Best Local Similarity 81.0%; Pred. No. 7.7e+02; Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seguence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                               Tsarev SA, Emerson SU, Purcell RH;
998 TGCTCATCAACGAGGGGAG 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 38; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               814 CACACGGAGAGTCCCTCACC 834
            1 IGCICATCAACTGGAGITGAG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 CACACTGAGAGTGCGTCATC 1
                                                                                                                                                   HEV strain BUR-121 primer R193.
                                                                        AAQ61708 standard; cDNA; 21 BP
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                                                                                                                                                                                                                                                                                                     92US-00947263.
                                                                                                                                                                                                                                                                               93WO-US008849.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ95568 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                          (USSH ) US SEC DEPT HEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                              (first entry)
                                                                                                                   (revised)
                                                                                                                                                                                                                                                                                                                                                                     WPI; 1994-118462/14.
                                                                                                                                                                                                                                                                                                     18-SEP-1992;
                                                                                                                                                                                                                                      WO9406913-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-FEB-1996
                                                                                                                  25-MAR-2003
21-OCT-1994
                                                                                                                                                                                                                                                           31-MAR-1994.
                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ95568;
                                                                                              AAQ61708;
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                                                   RESULT 630
                                                              AAQ61708/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ95568
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microsatellite marker sequences (MMS) at approx. 10-50 cM intervals throughout the human genome which can be detectably labelled. The MMS are polymorphic, simple sequence repeats and can be used in automated components, simple sequence repeats and can be used in automated components. The primers correspond to the unique components controlled the components of the components of the components. The primers correspond to the unique components. The MMS sequence surrounding each marker, and PCR is used to detect each components. The markers can difference in the number of repeats) between individuals, the markers can be particularly informative. The MMS can be ideal for linkage studies. CK its comprise at least 4 groups, of at least 3 sets, each comprising care shown in AAQ55465-480 and AAQ55559-590. The chromosomal markers, published size range of the allele and degree of heterozygosity in the component for the markers covered by these primer pairs are not given in the specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hepatitis E virus; HEV; SAR-55 strain; enteric transmission; structural region; antigen; detection; antibody; vaccine; immunisation; infection; Burma-121 strain; primer; polymerase chain reaction; PCR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kit for automated genotyping contg. pairs of PCR primers - designed to amplify polymorphic nucleotide repeat sequences, arranged in sets each with a characteristic fluorescence label, useful e.g. in detection of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The method aims to provide a collection of highly reproducible
                                                                     primer; polymerase chain reaction; PCR; linkage study; locus;
microsatellite marker sequence; automated genotyping; allele;
polymorphism; detection; Homo sapiens; ss.
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81.0%; Pred. No. 7.7e+02;
ve 0; Mismatches 4; Indels
Primer B2 (Group 4, set A) for a human chromosomal marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HEV strain Burma-121 derived reverse primer 193 (ORF-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 9 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disease related genetic rearrangement.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure, Fig 7D-3; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 AAGCAGCGTAAAGGATGGACA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AAGCATCTTAATGGATGGAAA 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94WO-US013945
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNING OLYU) (OLYU)
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Matches 17; Conservative
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WPI; 1998-568733/48.
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                                                                                                                                                                                                                                                                                                                                                           RESULT 634
                                                                                                                                                                                                                                                                                                                                                                     AAV38621/
ID AAV3
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                                                                                                                                                                                                            The present sequence is a hepatitis E virus (HEV) strain Burma-121 derived primer, used in the isolation of the HBV strain SAR-55 cDNA. The HBV strain SAR-55 cDNA. The HBV strain SAR-55 cDNA. The HBV strain SAR-55 was implicated in an enterically transmitted non-A, non-B hepatitis in Pakistan. The protein encoded by the structural region of the virus (i.e. ORF-2), which is capable of forming HEV like particles, is useful for the detection of HEV antibodies (pref. 199 or 199) in blood, plasma, sera, cerebrospinal fluid, tissue, urine or pleural fluid. The protein, and anti-HBV antibodies generated using the protein, can also be used in vaccines for immunising an animal against HEV infection. The protein is identified as a band of greater than 50 kb following SDS-PAGE of cell lysates of insect cells infected with a HEV ORF-2 context.
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hepatitis E virus; HEV; SAR-55; diagnostic agent; vaccine; antibody; passive immunisation; open reading frame; ORF; PCR primer; ss.
                                                                                                                                                Isolated and purified hepatitis E virus strain SAR-55 DNA - encodes antigenic protein useful in diagnosis, prophylaxis and treatment of hepatitis E virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.6; DB 1; Length 21;
31.0%; Pred. No. 7.7e+02;
Ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HEV ORF proteins encoding DNA amplifying primer R 193 B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Emerson SU, Purcell RH, Tsarev SA, Robinson RA;
                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                  (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                                         Purcell RH;
                                                                                                                                                                                            Example 1; Page 40; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                 814 CACACGGAGAAGTCCCTCACC 834
                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 cacacrdadaadracarc 1
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                                          95WO-US013102
                                                              94US-00316765
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                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 81.0%;
les 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                         Emerson SU,
                                                                                                                             WPI; 1996-209320/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
Hepatitis E virus.
                                                                                                                                                                                                                                                                                                                                             -1781
                                          03-OCT-1995;
                                                              03-OCT-1994;
WO9610580-A2
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                    11-APR-1996
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                                                                                                                                                                                                                                                                                                                                              -1780 and
                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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New hepatitis E virus DNA from Pakistani strain SAR-55 - used for, e.g. developing products for diagnosis of, and vaccination against hepatitis E virus infection.
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oligonucleotide which is substantially complementary to at least a portion of the pre- or mature % \left( 1\right) =\left\{ 1\right\} =\left\{ 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense oligonucleotides to ICAM-1, E-selectin or VCAM-1 - useful for treating diseases having an inflammatory component, e.g. psoriasis, wounds and septic shock.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 42; 204pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               present in a population and targets only one allelic form present in the normal somatic cells, and the first gene. The products and methods can be used in the diagnosis, prevention and treatment of LOH disorders, e.g. cancers, atherosclerotic plaques, preventionant metaplastic or dysplastic lesions, benign tumours, endometriosis, polycystic kidney disease, and graft versus host disease. The method can also be used to remove
RNA transcript of human intracellular adhesion molecule (ICAM), Eselectin or vascular cell adhesion molecule (VCAM). It can be used to inhibit expression of these proteins. Inhibition of these proteins forms the basis for treatment of conditions and diseases that have an
                                                                                  inflammatory component, e.g. acne, psoriasis, arthritis, organ rejection, wounds, burns, septic shock or inflammatory complications of septic shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH; cell viability; loss of heterozygosity; precancerous condition; ASI; allele specific inhibitor; somatic cell; diagnosis; prevention; atherosclerotic plaque; premalignant metaplastic lesion; endometriosis; dysplastic lesion; benign tumnour; polycystic kidney disease; transplant; graft versus host disease; malignant cell removal; bone marrow; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Identifying target genes for allele-specific drugs - used for diagnosis,
                                                                                                                                                                                                                                       Gaps
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nes 17; Conservative
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Matches
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AAZ26779
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malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
human polymorphic sites described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                              LKB1 gene; human, serine protease; Peutz-Jeghers syndrome; PJ syndrome; variation detection; therapy; diagnosis; primer; probe; ss.
                                                                                                        Gaps
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81.0%; Pred. No. 7.7e+02;
ive 0; Mismatches 4; Indels
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                                              Sequence 21 BP; 9 A; 5 C; 7 G; 0 T; 0 U; 0 Other;
                                                                         0.8%; Score 14.6; DB 1;
81.0%; Pred. No. 7.7e+02;
tive 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
                                                                                                                                     1613 AAGCCACAGACCGAGGCCCCA 1633
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                                                                                        Local Similarity 81.0 hes 17; Conservative
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This sequence represents a probe targeted at the ICP6 gene of herpes simplex virus type 2 (HSV-2) SB5 (ATCC VR 2546). It was used as a TagMan probe in quantiative analysis of the HSV-2 genome. The invention provides a novel genetic analysis method termed Fine Array Transcript Mapping (FAT Mapping) for detecting and measuring RNA molecules transcribed from a transcript. FAT mapping involves probing a test grid containing an array of 100s to 1000s of overlapping genomic clones or DNA fragments with probes consisting of labeled cDNAs representing the RNA transcripts from test populations. The system allows quantitative measurements of the expression of rare transcripts, and enables the analysis of 100s of genes within a genomic sequence in a single run. The method can be used to measure the differential expression of transcripts between 2 or more different viral, tissue or cell populations which share a common genomic sequence, or to determine whether a particular open reading frame is expressed under certain conditions. The FATMap technique has been applied
                                                                                                                                                                               Novel analytical method designated Fine Array Transcript Mapping, useful for detecting and measuring RNA molecules transcribed from a genome, differential expression, and sequence mapping.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 7.7e+02;
ive 0; Mismatches 4; Indels
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                                                                                                                                                                                                                                                                            Example 1; Page 17; 53pp; English.
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                                               (SMIK ) SMITHKLINE BEECHAM CORP.
  98US-0090464P.
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Best Local Similarity 81.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cohen D, Blumenfeld M,
                                                                                          Tal-Singer
                                                                                                                                       WPI; 2000-147217/13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             to the HSV-2 genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnosis; ss
  24-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-APR-1998;
23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-OCT-1999
                                                                                            Leary JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ75780;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ75780
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense oligonuclectides (ASO) for inhibiting a tumour necrosis factoralpha (TWF-alpha) gene in an animal, preferably a human, comprise 12-50 nucleotides, 90% of which are complementary to a region of mRNA containing a GGGA sequence motif. The ASO is used to inhibit expression of a gene in an animal and for treating the animal when afflicted with a disease or disorder characterised by the presence of an mRNA from a gene containing a GGGA motif. The ASO are specifically targeted to a GGGA sequence motif found in mRNA from a gene. A study of known ASO has shown that at least half of the most efficacious ASO's contain one or more TCC motifs. This ASO comprises a TCCC motif followed by a cytosine residue and corresponds to a region of the human ICAM-13' untranslated region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                     Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO; inhibition; expresssion; treatment; disease; disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Generation of antisense oligonucleotides - by specifically targeting GGGA motif found in mRNA sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.6; DB 1; Length 21;
31.0%; Pred. No. 7.7e+02;
ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fine array transcript mapping, FAT mapping, FATMap, HSV-2, differential expression; ICP6 gene; probe; ss.
                                          Tumour necrosis factor alpha antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 21 BP; 3 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HSV-2 ICP6 gene probe used in TaqMan analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2; Page 37; 55pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                225 TGAGAGTGGTGGTGGTGGCGG 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGAGAGGGAAGTGGTGGGGG 1
                                                                                                                                                                                                                                                                                                                                                                                                          (UYJE-) UNIV JEFFERSON THOMAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                                                                                                 97US-0051705P.
                                                                                                                                                                                                                                                                                                                    98WO-US013711,
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14-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 81.0
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Herpes simplex virus 2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tu G, Israel Y;
                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                               WO9901139-A1
                                                                                                                                                                                                                                                                                                                    02-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                 03-JUL-1997;
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                                                                                                                                                                                                                                                                         14-JAN-1999
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                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
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Best Loca Matches

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(GEST ) GENSET
                                                                                          diagnosis; ss
                                                                                              Homo sapiens
                                                                                                  WO9954500-A2
                                                                                                         21-APR-1999;
                                                                                                             21-APR-1998;
                                                                                                               23-NOV-1998;
                                                                                                      28-OCT-1999
                                                          Н
                                                                        AAZ73450;
                                               Query Match
                                                   Matches
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invention, which contain a polymorphic base at position 24 of their invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AA269579 to AA27744 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the pharmaceutical agents acting on a disease as well as other treatment. N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined primer sets, useful for subtyping or typing of HLA Class I alleles.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a method for the locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukrocyte antigen (HLA)-4, HLA-B, or HLA-C alleles. The method is useful for subtyping or typing of HLA, class 1 alleles. The present sequence is an amplification primer used in the method
AAZ65654 to AAZ69578 represent human biallelic markers from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 7.7e+02;
ative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 14.6; DB 1; Length 21; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Reverse primer #25 used for amplification of HLA-A exon 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 1 A; 9 C; 7 G; 3 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 2 A; 1 C; 9 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HLA-A; HLA-B; HLA-C; typing; primer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         429 CAACCATCCCCCACGCAAGAT 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 4; Page 35; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21 CAACCACCAACACTCAAGAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rossau
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%;
88.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC80113 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (INNO-) INNOGENETICS NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-647426/62.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-APR-1999;
11-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAC80113,
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                                                                                                                                                                                   AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from
                                                                                                                                                                                                                                                                                                                                                                                                                                                             pharmaccutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
3367, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel biallelic markers used to construct a high density disequilibrium map of the human genome.
                                                                         Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human biallelic marker upstream amplification primer SEQ ID NO:7806.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 8 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chumakov I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 9; Page 1895; 2745pp; English
                                                                                                                                                Claim 9; Page 2391; 2745pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%;
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98US-0109732P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-SEP-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cohen D, Blumenfeld M,
                                                                                                     map of the human genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-013267/01
                           WPI; 2000-013267/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present invention
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Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; cocronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic acids comprising single nucleotide polymorphisms, useful in
                                                                                                                                                                                                                                                                                                                                                                /standard_name= "single nucleotide polymorphism"
                                                                                                                        Human gene single nucleotide polymorphism #1316.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (WHED ) WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gargill M, Ireland JS,
                                                                                                                                                                                                                                                                                                     Location/Qualifiers replace(11,G)
      AAF96555 standard; DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-SEP-1999; 99US-0153357P.
26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-025724P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-SEP-2000; 2000WO-US024503.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MILLENNIUM PHARM INC.
                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-226749/23.
                                                                                                                                                                                                                                                                                                                                                                                                       WO200118250-A2
                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                   06-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                               15-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lander ES,
                                                                                                                                                                                                                                                                                                                            Variation
                                           AAF96555;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MILL-)
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Matches
      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes a knockout mammal for the serine/
threonine kinase gene LKBI (also known as STKII), in which all or part of
the gene or its expression regulating region is deleted. Also described
are: (1) cells which have the potential to differentiate, from the
Knockout mammal, in which expression of the intrinsic LKBI gene is
suppressed, and (2) producing the animal in which these cells are
inserted into an isolated embryo of the mammal, which is then implanted
into a false-pregnancy host female and brought to term. The knockout
cammal can be used in the investigation of the onset mechanism of
diseases in which LKBI defects are implicated, including many tumours and
Cdiseases in which LKBI defects are implicated, including many tumours
CC remedies and treatment methods for these diseases, including the
cremedies and treatment methods for these diseases, including the
cremedies and treatment methods for these diseases, including the
cremedies and treatment methods for these diseases, including the
cremedies may have LKBI suppression which is time or tissue specific.
The present sequence represents a PCR primer used in the amplification of
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      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Knockout mammal for LKB1 (STK11) gene for the investigation of and development of treatments for cancer and Peutz-Jeghers syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence represents a PCR primer used in the amplifica mouse LKB1, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                           Mouse; LKB1; gene knockout animal; LKB1 gene disruption; cancer; Peutz-Jeghers syndrome; serine/threonine kinase; STK11; tumour;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
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Pred. No. 7.7e+02;
0; Mismatches 4; Indels
    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 3 A; 2 C; 10 G; 6 T; 0 U; 0 Other;
      ..
H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RES INST MOLECULAR MEDICINE INC. SEIYAKU KK.
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jenne DE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 13; 75pp; Japanese.
                                                                                                                                                                                                                                                                                                   Mouse LKB1 PCR primer SEQ ID NO:7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
  1;
                                         249 TGACCCTGGAGAGGCCC 265
                                                                                                                                                                               AAC92275 standard; DNA; 21 BP
                                                                             Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAY-2000; 2000WO-JP003504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99JP-00153030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ose A, Jishage K,
                                                                             21 TGHCCCGGGAGAGGCCC
                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.8 Best Local Similarity 81.0 Matches 17; Conservative
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-061412/07.
                                                                                                                                                                                                                                                                                                                                                                                PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200072670-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHUGAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAY-1999;
                                                                                                                                                                                                                                                              22-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-DEC-2000.
  15;
                                                                                                                                                                                                                      AAC92275;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nezu J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CHINS
                                                                                                                                         RESULT 642
  Matches
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Mccarthy JJ;

Daley GQ,

Bolk S,

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                                                     The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also useful in forenaics, paternity testing, genetic analysis and phenotype correlations to diseases. The present sequence is an example of one of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.6; DB 1; Length 21; 31.0%; Pred. No. 7.7e+02; Ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                            the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        494 TCCGGCTGCCTGAGGCTACC 514
Example; Page 139; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             recrectecteardactace 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        larity 81.0%;
Conservative
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nes 17; Conserv
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ID AAF9
XX
AC AAF9
XX
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814 CACACGGAGAAGTCCCTCACC 834

à g

CACACGCAGTACTCCATCACC 1

21

RESULT 643 AAF96555

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The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pullmonary embolism. Single nucleotide polymorphisms (SMPS) are also useful in forensics, paternity testing, genetic analysis and phenotype correlations to diseases. The present sequence is an example of one of the human gene SNPS shown in the specification
                                                         Human, variant thrombospondin 1; variant thrombospondin 4; SNP;
polymorphism; vascular disease; coronary artery disease; forensics;
myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                                           /standard name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14.6; DB 1; Length 21; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 2 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human gene single nucleotide polymorphism #1079.
                           Human gene single nucleotide polymorphism #820.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bolk
                                                                                                                                                                                                                                                                                                                                                                                                                          (WHED ) WHITEHEAD INST BIOMEDICAL RES. (MILL-) MILLENNIUM PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1028 TGGCTGACTTTGGCCTGGCCC 1048
                                                                                                                                                                           Location/Qualifiers replace(11,C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example; Page 105; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 TGCCTGACTTTGATGTGGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                         10-SEP-1999; 99US-0153357P.
26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-025724P.
                                                                                                                                                                                                                                                                                                                            07-SEP-2000; 2000WO-US024503.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match 0.8%;
Local Similarity 81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF96318 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
06-JUN-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17; Conservative
                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gargill M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-226749/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atherosclerosis.
                                                                                                                                                                                                                                                             WO200118250-A2
                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JUN-2001
                                                                                                                                                                                                                                                                                            15-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lander ES,
                                                                                                                                                                             Key
Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF96318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF96318
ID AAF9
XX
AC AAF9
AC AAF9
DT 06-J
XX
DE Huma
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The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular disease, wenous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPB) are also useful in forensics, paternity testing, genetic analysis and phenotype correlations to diseases. The present sequence is an example of one of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.
Human, variant thrombospondin 1, variant thrombospondin 4, SNP, polymorphism, vascular disease, coronary artery disease, forensics; myocardial infarction, atherosclerosis, stroke, venous thromboembolism,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and atherosclerosis.
                                                                                                                                                                                 /standard_name= "single_nucleotide_polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 5 A; 9 C; 7 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human gene single nucleotide polymorphism #1821.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bolk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                       pulmonary embolism; paternity test; ds
                                                                                                                                                                                                                                                                                                                                                                                                  (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1379 GGGCCGACCTCCTCACCAAGC 1399
                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example; Page 126; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGCCCGACCCGACCCAAGC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                          10-SEP-1999; 99US-0153357P.
26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-025724P.
                                                                                                                                              replace (11, T)
                                                                                                                                                                                                                                                                                          07-SEP-2000; 2000WO-US024503.
                                                                                                                                                                                                                                                                                                                                                                                                                   (MILL-) MILLENNIUM PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF97060 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best_Local Similarity 81.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gargill M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-226749/23
                                                                                                                                                                                                                    WO200118250-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JUN-2001
                                                                                              Homo sapiens
                                                                                                                                                                                                                                                       15-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lander ES,
                                                                                                                               Key
Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF97060;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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AAF97060/c
         g
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Gaps

Tue Nov

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Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and atherosclerosis.
                                                *tag= a
/standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                             Bolk S, Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 7 A; 1 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                              (WHED ) WHITEHEAD INST BIOMEDICAL RES. (MILL-) MILLENNIUM PHARM INC.
                            Location/Qualifiers
replace(11,A)
                                                                                                                                                                                                              Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1683 CTACATCTTCCCTGCTTACTC 1703
                                                                                                                                                                                                                                                                                                        Example; Page 169; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 CCACATCTTCAATGATTACTC 1
                                                                                                                     07-SEP-2000; 2000WO-US024503.
                                                                                                                                        99US-0153357P.
                                                                                                                                                            16-AUG-2000; 2000US-0225724P.
                                                                                                                                                  26-JUL-2000; 2000US-0220947P
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 81.0.
Best Local 17; Conservative
                                                                                                                                                                                                              Gargill M,
                                                                                                                                                                                                                                  WPI; 2001-226749/23.
                                                                              WO200118250-A2
                                                                                                                                      10-SEP-1999;
          Homo sapiens
                                                                                                                                                                                                             Lander ES,
                                       Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 647
                              Key
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
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The invention relates to the isolation of the sequence of the gene encoding a horse granulcoyte-macrophage colony stimulating factor (GM-CSF of AMP28953). The gene was isolated from horse lymphocytes by using a 5' and 3' RACE (rapid amplification of cDNA ends) method followed by a reverse transcriptase (RT) PCR method. The sequence shown here represents the 5' RACE primer JP730 used to isolate the 5' end of the equine GM-CSF conserved formation in various types of blood cells and particularly induces colony formation in various types of blood cells and particularly induces cytotoxicity of macrophages; stimulates antibodycopering inflammation. Vectors containing the gene or the protein itself, are useful as adjuvants in immunogenic or vaccinating compositions for horses, e.g. for protection against equine heres, teranus, Borrelia consecution adjunct example, plasmid pJP097, containing the sequence for equine GM-CSF was used to transform CHO-KI cells and the constitute medium being used to grow porcine bone marrow cells. After 14 days, the mean number of colonies per culture supernatant was then added the none for cells grown in absence of GM-CSF. Equine GM-CSF allows a colonies per culture containing component required, with none for cells grown in absence of GM-CSF. Equine GM-CSF allows a cell containing component required,

induce a response in animals that would otherwise be non-

may

Sequence 21 BP; 3 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Novel DNA encoding equine granulocyte-macrophage colony-stimulating factor, useful as adjuvant for vaccines and as non-specific immunostimulant.

Example 2; Page 13; 34pp; French.

Andreoni CMP:

Perez JM,

Bublot M,

(MERI-) MERIAL

WPI; 2001-080689/09.

08-JUN-2000; 2000WO-FR001590.

21-DEC-2000.

99US-0138843P.

10-JUN-1999;

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The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also correlations to diseases. The present sequence is an example of one of the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
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Gaps

.. 0

0.8%; Score 14.6; DB 1; Length 21; 31.0%; Pred. No. 7.7e+02; ive 0; Mismatches 4; Indels

81.0%;

17; Conservative

Matches

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Local Similarity

Query Match

618 CATTAAGCTGGACAAACTGGG 638

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11913;
                                                                                                                                                                                                                                           PCR primer for mechanically sensitive potassium channel gene fragment.
                                                                                                                                                                                                                                                                               Human; mechanically sensitive potassium channel; riluzole; TWICK; polyunsaturated fatty acid; arachidonic acid; hTRAAK; chromosome neuronal excitation; muscle excitation; cardiac rhythm; anoxia; hormone secretion; cardiac disease; vascular disease; ischemia; nervous system disorder; endocrinal disease; muscle disease; retinal disease; epilepsy; cardiac arrhythmia; neurodegeneration;
  ccrgaagcrgracaaacaggg 1
                                                                                                              BP
                                                                                                              AAH78643 standard; DNA; 21
                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                    PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                  10-DEC-2001
                                                                                                                                                     AAH78643;
    21
                                                                   RESULT 648
                                                                                          AAH78643
g
                                                                                                                                   Immunostimulatory, granulocyte-macrophage colony stimulating factor, horse; reverse transcriptase PCR; colony formation; blood, cytotoxicity; inflammation; vector; adjuvant; immunogen; vaccination; vaccine; ss; equine herpes; tetanus; Borrelia burgdorferi; rabies; 5'RACE; primer.
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Equine GM-CSF gene 5' RACE primer JP730.

WO200077210-A1.

Equus sp

(first entry)

18-JUN-2002

AAF28957;

AAF28957 standard; DNA; 21 BP

10017621-381.rng

Page 329

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PCR primers AAH78642-43 were used to amplify a gene fragment of the human mechanically sensitive potassium channel gene. The channel is activated by polyunasturated fatty acids (particularly arcabidonic acid (AA)) and by pilunasturated potassium channel (hTRAAK). The hTRAAK gene is located activated potassium channel (hTRAAK). The hTRAAK gene is located on chromosome 11q13. hTRAAK is involved in regulation of neuronal and muscle excitation, cardiac rhythm and secretion of hormones. Cells that express hTRAAK, designated to screen for modulators of hTRAAK activity. Such modulators are potentially useful for prevention or treatment, in humans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modulators are potentially useful for prevention or treatment, in humans and animals, of: cardiac and/or vascular disease; nervous system discorders associated with ischemia and anoxia; endocrinal diseases associated with anomalous hormone secretion or muscle diseases; and retinal diseases. Typical examples are epilepsy, cardiac arrhythmia and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, mechanically sensitive potassium channel, riluzole, TWICK, polyunsaturated fatty acid, arachidonic acid, hTRAAK, chromosome 11q13, neuronal excitation; muscle excitation, cardiac rhythm; anoxia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR primer for mechanically sensitive potassium channel gene fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New mechanically sensitive potassium channel, useful for treating cardiovascular diseases and in drug screening, is activated by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hormone secretion; cardiac disease; vascular disease; ischemia;
nervous system disorder; endocrinal disease; muscle disease;
retinal disease; epilepsy; cardiac arrhythmla; neurodegeneration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seguence 21 BP; 3 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                          Maingret F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1273 GAGACGTGGCCAGGCATCCTG 1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 15; 37pp; French.
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                                                                                                                                                                                                                                                                                   (CNRS ) CNRS CENT NAT RECH SCI
                                                                                                                                         14-MAR-2001; 2001WO-FR000758.
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                                                                                                                                                                                                             14-MAR-2000; 2000FR-00003264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polyunsaturated fatty acids.
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                                                                                                                                                                                                                                                                                                                                                          Lesage F,
                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-590037/66.
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WO200168670-A2
                                                                                                                                                                                                                                                                                                                                                      Lazdunski M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-DEC-2001
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                                                                      20-SEP-2001
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AAH78640
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Gaps

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PCR primers AAH78639-40 were used to amplify a gene fragment of the human mechanically sensitive potassium channel gene. The channel is activated by polymosturated fatty acids (particularly archidonic acid (AA) and by polymosturated fatty acids (particularly archidonic acid (AA) and by riluzole. The polypeptide is designated human TWICK-related AA-activated potassium channel (hTRAAK). The hTRAAK gene is located on chromosome 11q13. hTRAAK is involved in regulation of neuronal and muscle excitation, cardiac rhythm and secretion of hormones. Cells that express hTRAAK, designated to screen for modulators of hTRAAK activity. Such modulators are potentially useful for prevention or treatment, in humans and animals, of: cardiac and/or vascular disease, nervous system disorders associated with ischemia and anoxia; endocrinal diseases associated with anomalous hormone secretion or muscle diseases; and retinal diseases. Typical examples are epilepsy, cardiac arrhythmia and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPB; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                      New mechanically sensitive potassium channel, useful for treating cardiovascular diseases and in drug screening, is activated by polyunsaturated fatty acids.
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81.0%; Pred. No. 7.7e+02;
ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seguence 21 BP; 3 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP specific lower PCR primer SEQ ID 2810.
                                                                                                   Lazdunski M, Lesage F, Maingret F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1273 GAGACGTGGCCAGGCATCCTG 1293
                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 15; 37pp; French.
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                             (CNRS ) CNRS CENT NAT RECH SCI
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                                                                                                                                                                      WPI; 2001-590037/66.
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New genotyping oligonucleotide, useful for detecting the presence,

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Example 1; Page 57; 69pp; English.

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primer extension (SNPE) primers, and the sequences of regions flucteoride primers and the sequences of regions flucteoride primers, and the sequences of regions flucteoride sites of single nucleotide polymorphisms SNPs. The present invention includes kits for determining the presence or absence of a SNP, using the oligomucleotides of the invention. The PCR primers are used to amplify a SNP flanking sequence, the SNPE primer is used as a genotyping primer. The oligomucleotides are useful for genotyping a mucleic acid sample by performing a single-nucleotide primer setusion reaction. The oligomucleotides are useful for genotyping a mucleic acid sample by performing a single-nucleotide primer setusion reaction. The oligomucleotides are useful for genotyping nucleic acid samples, for e.g. to sesses by association analysis the genotype crait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. individuals, having a pathological phenotypic traits include disease e.g. adammaglobulinamenia, diabetes insiphdus, Lesch-Nyhan syndrome, muscular dystrophy, familial hypercholesterolaemia, polycystic kidney disease, osteogenesis imperfecta and acute intermittent porphyria. Phenotypic craits also include symptoms of or susceptibility to multifactorial disease of which a component is or may be genetic such as autoimmune diseases, including, rheumatoid arthritis, multiple sclerosis, inflammation, cancer, hervous system diseases and infection by pathogenic inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     paternity analysis. The present sequence represents a PCR primer specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Maize; NPR1-interacting protein; disease resistance; sequence shuffling;
transgenic plant; signal transduction pathway; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              microorganism. The method is also useful in forensic investigations and
absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                                    - AAH40944 represent PCR primers, single nucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Primer PHN33881, to identify proteins that interact with maize NPR1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 5 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for a human SNP containing DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     223 GATGAGAGTGGTGGTGGTGGC 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GATGACAGAGGTGGTCATGGC 21
                                                                  Claim 1; Page 64; 83pp; English.
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                                                                                                                 Sequences AAH37205
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                      acid sample.
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                                              encoding them. NPRI-interacting DNA is useful for modulating the level of NPRI-interacting DNA is useful for modulating the level of manipulating NPRI-interacting DNA in maize or in other plants, the plant can be engineered to improve resistance to pathogens by increasing the sensitivity or capacity of the signal transduction pathway. The plants containing altered NPRI expression are useful as universal disease susceptible plants. NPRI-interacting DNA is further useful for sequence shuffling. They are also used as probes. The invention also provides transgenic plants with increased disease resistance. The present sequence is an internal primer used to identify proteins that interact with NPRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to selenoproteins encoded in the genome of a virus, where the coding sequence of the selenoprotein is genetically engineered for expression in a nucleic acid construct. The invention also discloses a method for identifying selenoprotein coding sequences, for detecting certain viruses (e.g. HIV or Ebola), cancer and immune system disorders. The present sequence was used to illustrate the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                   invention relates to NPR1-interacting proteins and nucleic acids
                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New selenoprotein for use in detecting certain viruses, e.g. human immunodeficiency virus (HIV) or Ebola, cancer and immune system
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                                                                                                                                                                                                                                                                                 0.8%; Score 14.6; DB 1; Length 21;
31.0%; Pred. No. 7.7e+02;
ive 0; Mismatches 4; Indels
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                                                                                                                                                                                                                                                Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
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61.9%; Pred. No. 7.7e+02;
tive 4; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Taylor EW, Nadimpalli RG, Ramanathan CS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Col 69-70; 140pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYGE-) UNIV GEORGIA RES FOUND INC.
                                                                                                                                                                                                                                                                                                                                                       821 AGAAGTCCCTCACCCTTGTCT 841
                                                                                                                                                                                                                                                                                                                                                                                         21 AGAAGTCGCTCTCCTTTGGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
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95US-0003112P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96US-00679493
                                                                                                                                                                                                                                                                                                  ilarity 81.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABA01357 standard; RNA; 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-024734/03.
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Best Local Similarity
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es 17; Conserv
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01-SEP-1995;
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 652
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The present invention relates to selenoproteins encoded in the genome of a virus, where the coding sequence of the selenoprotein is genetically engineered for expression in a nucleic acid construct. The invention also discloses a method for identifying selenoprotein coding sequences, for detecting certain viruses (e.g. HIV or Bbola), cancer and immune system disorders. The present sequence was used to illustrate the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
                                                                                                                                                                                        New selenoprotein for use in detecting certain viruses, e.g. human immunodeficiency virus (HIV) or Ebola, cancer and immune system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New selenoprotein for use in detecting certain viruses, e.g. human immunodeficiency virus (HIV) or Ebola, cancer and immune system
                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.6; DB 1; Length 21; 1.9%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                        4; Mismatches
                                                                                                                                    Ramanathan CS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ramanathan CS;
                                                                                                                                                                                                                                              Disclosure; Col 69-70; 140pp; English.
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                                                                                                         (UYGE-) UNIV GEORGIA RES FOUND INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  862 CTGAAGCAGTACCTGGATGAC 882
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1 CUGAUCCAAUACAUGGAUGAC 21
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                                                                  95US-0001203P.
                                                                              95US-0003112P
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                                                                                                                                                                                                                                                                                                                                                                                                          61.9%;
                                                                                                                                    Nadimpalli RG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABA01355 standard; RNA; 21
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                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 61.9
nes 13; Conservative
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01-SEP-1995;
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              16-OCT-2001.
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                                                                                                                                     Taylor EW,
                                                                                                                                                                                                                 disorders.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                     Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              New selenoprotein for use in detecting certain viruses, e.g. human immunodeficiency virus (HIV) or Ebola, cancer and immune system
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 8 A; 4 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                         Nadimpalli RG, Ramanathan CS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Col 69-70; 140pp; English.
                                                                                                                                                                                                                                                                                                                                                                               (UYGE-) UNIV GEORGIA RES FOUND INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         862 CTGAAGCAGTACCTGGATGAC 882
CTGAAGCAGTACCTGGATGAC 882
              |:|| || :|| :|||:|||| cugauccaauacauggaugac 21
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                                                                                           ВР
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                                                                                          ABA01358 standard; RNA; 21
                                                                                                                                                 (first entry)
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                                                                                                                                                                           YMDD oligonucleotide #18.
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Matches 13; Conserv
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                                                                                                                                                                                                                                                                                    16-OCT-2001
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ABK53794;
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 RESULT 657
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              AAD30438
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The present invention relates to selenoproteins encoded in the genome of a virus, where the coding sequence of the selenoprotein is genetically engineered for expression in a nucleic acid construct. The invention also discloses a method for identifying selenoprotein coding sequences, for detecting certain viruses (e.g. HIV or Ebola), cancer and immune system disorders. The present sequence was used to illustrate the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to selenoproteins encoded in the genome of a virus, where the coding sequence of the selenoprotein is genetically engineered for expression in a mucleic acid construct. The invention also discloses a method for identifying selenoprotein coding sequences, for detecting certain viruses (e.g. HIV or Ebola), cancer and immune system disorders. The present sequence was used to illustrate the invention. (Updated on 07-MOG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                            Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New selenoprotein for use in detecting certain viruses, e.g. human immundeficiency virus (HIV) or Ebola, cancer and immune system
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                                                                                                            0.8%; Score 14.6; DB 1; Length 21; 61.9%; Pred. No. 7.7e+02; tive 4; Mismatches 4; Indel8
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                                                                                     Seguence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seguence 21 BP; 5 A; 5 C; 6 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nadimpalli RG, Ramanathan CS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Col 69-70; 140pp; English.
                                                                                                                                                             862 CTGAAGCAGTACCTGGATGAC 882
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                                                                                                                                                                                                                                                ABA01365 standard; RNA; 21
                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                     Mouse mammary tumor virus.
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nes 13; Conservative
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                                                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                                 (revised)
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03-JUL-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disorders,
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The invention relates to a method for assessing the risk of prostate cancer in a human subject. The method involves determining the length of the contiguous CAG or CAA repeats in both AIBI (Amplified In Breast cancer 1) gene alleles or contiguous CAG, CAA or GGN repeats in the androgen receptor gene of the subject. The method is useful for assessing a subject's risk for acquiring or developing prostate cancer. The present sequence is a DNA encoding human androgen receptor (AR) polyglycine tract. This sequence is used in the molecular analysis and assessment of the CAG and GGN repeat of AR gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Assessing the risk of acquiring or developing prostate cancer in a human subject, comprises determining the length of the contiguous CAG, CAA and/or GGN repeats in the AIB1 gene and/or androgen receptor gene of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                    Human, AIB1, amplified in breast cancer 1; androgen receptor; AR; prostate cancer; polyglycine; ds.
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                                                                                                                                                                     Human androgen receptor (AR) polyglycine tract encoding DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 7.7e+02;
ive 0; Mismatches 4; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               232 GGTGGTGGTGGCGCAGTGAC 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; Page 45; 86pp; English.
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BP.
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  AAD30438 standard; DNA; 21
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Best Local Similarity 81.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                   Homo sapiens.
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The invention relates to a recombinant dimethyl sulphide (DMS):acceptor oxidoreductase (I) or its subunit selected from recombinant alpha, beta, delta and gamma subunits. (I) is useful for oxidising prochiral organic sulphides to form sulphoxide enantiomers for chiral drug synthesis. (I) is expressed in a transformed bacterium. The enantiomer formed is useful for producing a chiral drug. (I) is useful for synthesis of optically-active functional groups of drug. DNA encoding (I) is useful for producing a strain of DMS:acceptor oxidoreductase- deficient Rhodovulum oxidoreductase activity is unwanted. ABKG3751-ABK53805 represent R. sulfidophilum DMS:acceptor oxidoreductase subunit coding sequences and
                                                                                                                                                                                                  New recombinant dimethyl sulfide:acceptor oxidoreductase or its subunits, useful for oxidizing prochiral organic sulfides to form sulfoxide enantiomers for chiral drug synthesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumour necrosis factor receptor 2; TNFR2; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 3 A; 11 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14.6; DB 1;
Pred. No. 7.7e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human INFR2 forward PCR primer SEQ ID NO:4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  346 AAGATGGGGTCTGATGGGGAG 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | |||||||| | ||||| ATGATGGGGAG 1
                                                                                                                                                                                                                                                           Claim 15; Page 46; 66pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primers of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-APR-2001; 2001US-00844634.
                                                       21-AUG-2001; 2001WO-AU001033
                                                                                   21-AUG-2000; 2000AU-00009559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-APR-2001; 2001US-00844634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABQ74754 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-OCT-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 81.0
les 17; Conservative
                                                                                                                                            Mcewan AG;
                                                                                                                (UYQU ) UNIV QUEENSLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bennett CF, Watt AT;
                                                                                                                                                                      WPI; 2002-280922/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-606814/65.
WO200216570-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     primer; ss
                                                                                                                                            Mcdevitt CA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US6410324-B1
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                            28-FEB-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 659
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                                                                                             to a nucleic acid encoding human or mouse tumour necrosis factor receptor 2 (TWFR2). Also described is a method for inhibiting expression of human or mouse TWR2 comprising contacting cells or tissues in vitro with one of the claimed compounds. The antisense compounds are used to treat a disease or condition associated with expression of TWFR2. The present sequence represents a PCR primer for human TWFR2, which is used in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human, NOVX; atherosclerosis; hypertension; obesity; cancer; cytostatic; hypotensive; antiarteriosclerotic; anorectic; gene therapy; NOV68; PCR;
                                                                                The present invention describes compounds of 8-30 nucleobases antisense
New compounds antisense to nucleic acid encoding human or mouse tumor necrosis factor receptor 2 are useful to treat disease associated with mouse tumor necrosis factor receptor 2 expression.
                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                   0.8%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                              4; Indels
                                                                                                                                                                                                         Sequence 21 BP; 4 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                              example from the present invention
                                                                                                                                                                                                                                                                                          338 AGGACTTGAAGATGGGGTCTG 358
                                                       Example 13; Col 44; 69pp; English.
                                                                                                                                                                                                                                                                                                                  21 AGGAATTGAAGGTGGGGAGTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NOV68 PCR primer, SEQ ID 461.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001US-0272405P.
2001US-0272410P.
2001US-0272414P.
2001US-0272787P.
                                                                                                                                                                                                                                                                                                                                                                                        ADH49177 standard; DNA; 21 BP
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2001US-0277324P.
2001US-0278660P.
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2001US-0272404P.
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2001US-0273048P.
2001US-0273300P.
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2001US-0299845P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                Local Similarity 81.0 les 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200268652-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-FEB-2001;
02-MAR-2001;
02-MAR-2001;
02-MAR-2001;
02-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-MAR-2001;
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20-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-FEB-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                   ADH49177;
                                                                                                                                                                                                                                     Query Match
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Matches
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Gaps

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Length 21; 4; Indels

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                                                                                                                                                                                                  Peyman JA;
Stone DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Inflammatory bowel disease; Crohn's disease; ulcerative colitis; INF; tumour necrosis factor; polymorphism, haplotype; diagnosis; Caucasian; antiinflammatory; gene therapy; INF antagonist; OCT1; EMSA; electrophoretic mobility shift assay; probe; ss.
                                                                                                                                              Alsobrook JP, Anderson DW, Ballinger RA, Boldog FL, Burgess CE; Casman SJ, Ellerman KE, Gangolli EA, Gerlach VL, Gilbert JA; Gorman L, Guo X, Gusev VY, Kekuda R, Li L, Liu X, Malyankar UM; Miller CE, Miller I, Padigaru M, Patturajan M, Pena CEA, Peyman C Rastelli L, Shenoy SG, Shimkets RA, Smithson G, Spytek KA, Stone Taupier RJ, Tchernev VT, Vernet CAM, Zerhusen BD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                    treating disorders or syndromes e.g., atherosclerosis, hypertension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human OCT1 consensus binding site EMSA probe top strand, OCT1 F.
                                                                                                                                                                                                                                                                                                   New NOVX polypeptides or polynucleotides, useful for preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 8 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                     Example 2; Page 833; 923pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        331 GTGCACGAGGACTTGAAGATG 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGCAAGAGACAAGGAGATG 21
13-AUG-2001, 2001US-0311981P.
16-AUG-2001, 2001US-0312868P.
17-AUG-2001, 2001US-031280P.
29-AUG-2001, 2001US-031280P.
17-SEP-2001, 2001US-0322818P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADB92791 standard; DNA; 21 BP
                                                                                 25-FEB-2002; 2002US-00322818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-OCT-2002; 2002WO-GB004582
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Van Heel D, Lench N;
                                                                                                                  (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-393451/37.
                                                                                                                                                                                                                                                                    WPI; 2002-698672/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (OXAG-) OXAGEN LTD
                                                                                                                                                                                                                                                                                                                                       obesity or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003031651-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADB92791;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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The invention relates to a method for determining the susceptibility of an individual to inflammatory bowel disease. The method comprises screening the genetic material of the individual to determine which allele of the TNF (tumour necrosis factor) -857c/T polymorphism is present. The invention also relates to a method of determining the susceptibility to, or confirming the diagnosis of, Crohn's disease in a causasian individual comprising screening the genetic material of the subject for the presence of the TNF -1031C/-863C/-857C/-308G haplotype. The invention additionally encompasses gene therapy for Crohn's disease in a causasian with the -1031C/-863C/-857C/-308G haplotype. Cromprision of genetic material comprising the TNF production of genetic material comprising the TNF production for the invention further discloses methods for preventing TNF production for the treatment of inflammatory bowel disease. Inflammatory bowel disease. The invention is bases on the disease of the bowel gastrointestinal tract, and can exist as either ulcerative colitis, or as Crohn's disease. The invention is bases on the disease of the bowel gastrointestinal tract, and can exist as either ulcerative colitis, or as Crohn's disease. The invention is bases on the disease of the bowel gastrointestinal tract, and can exist as either ulcerative colitis, or as Crohn's disease. The invention involve additional determination of these NoD2 che invention involve additional determination of these NoD2 che invention involve additional determination of these NoD2 clauses of the invention subject to inflammatory bowel disease, such as ulcerative colitis of a Crohn's disease. The methods are also useful for confirming the diagnosis of a Crobn's disease. The methods are also useful for confirming the diagnosis of a clausasian subject as having crohn's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       determining the response of a patient to treatment. The agents and the genetic material, comprising TNF -1031T, -863T, -857T and/or -308A alleles, or TNF -1031T/-663T/-857T-308A haplotype, are useful in manufacturing a medicament for preventing or treating Crohn's disease in a Caucasian subject. Sequences ADB92791-ADB92792 represent the top and bottom strands of a consensus OCT1 binding site EMSA (electrophoretic mobility shift assay) probe used in the example of the invention. OCT1 is
Determining the susceptibility of a Caucasian subject to inflammatory bowel disease such as Crohn's disease, comprises screening the genetic material of the subject to determine which allele of the TNF -857C/T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
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31.0%; Pred. No. 7.7e+02;
ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 7 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1506 CATATITGCACTAAAGGAGAT 1526
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                                                                                                                                                    Example; Page 19; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       transcription factor for INF.
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nes 17; Conservative
                                                                                             polymorphism is present.
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Matches
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Protease; immunomodulator; antigen; antigen-presenting cell; reporter;

20-NOV-2002; 2002WO-US037123.

WO2003065977-A2. Unidentified.

14-AUG-2003.

Nucleic acid encoding caspase-2 protease cleavage signal.

(first entry)

04-DEC-2003

ADB79190;

ВР

ADB79190 standard; DNA; 21

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The invention letaters to a new vertenage cert. This is a control of control 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cleavage signal. Such a protease is useful to the invention for cleaving the antigenic peptide from the heterologous polypeptide at the linker
                                                                                                                                                                                                                               New vertebrate cell comprising a nucleic acid encoding an exogenous antigen-presenting molecule or encoding a fusion polypeptide comprising an antigen, useful for preparing a composition for modulating an immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 molecule, an accessory molecule, a cytokine, a chemokine and/or an adhesion molecule. The costimulatory molecule is CB80 or CB81. The antigen is a tumour-specific antigen. The vertebrate cell comprising a nucleic acid encoding an exogenous antigen-presenting molecule or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             encoding a fusion polypeptide comprising an antigen, is useful for preparing a composition for modulating an immune response. The current
                                                                                                                                                                                                                                                                                                                                                                                                                                      invention relates to a new vertebrate cell. This cell comprises a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rat ERK-3 designed oligonucleotide probe, El3, #2.
                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 36; 91pp; English.
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                                                                                                                                  Nadler LM;
                                                                         (DAND ) DANA FARBER CANCER INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                      20-NOV-2001; 2001US-0331928P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17; Conservative
                                                                                                                                  Butler M,
                                                                                                                                                                                  WPI; 2003-636934/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
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                                                                                                                                  Hirano N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence
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ADC64462
XIX
AC ADC644
XX
AC ADC644
XX
XX
DY 18-DEC
XY
DE RAL ER
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ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
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ö Gaps ; 0 0.8%; Score 14.6; DB 1; Length 21; 31.0%; Pred. No. 7.7e+02; 4; Indels Sequence 21 BP; 2 A; 5 C; 11 G; 3 T; 0 U; 0 Other; 0; Mismatches 372 CCAGGCTTCAGCCACGTCCTC 392

human; KIAA0172; cancer; ss; PCR; primer. Human KIAA0172 associated primer #12.

(first entry)

15-JAN-2004

ADD35311;

01-APR-2002; 2002JP-00099422.

JP2002369696-A. Homo sapiens.

24-DEC-2002.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention discloses a new antibody comprising a specific binding affinity to the human extracellular signal regulated kinase (hERK)-5 protein. ERKs are also referred to as mitogen activated protein (MAP) kinases. The hybridoma that produces the monoclonal antibody is also claimed. The antibody is useful for preparing a composition for treating hERK-5-associated diseases e.g. diabetes mellitus, Alzheimer's disease or peripheral neuropathies in a mammal. The polymucleotide encoding the protein is also useful for treating these diseases using gene therapy rechniques. The sequence presented is an oligonucleotide probe, version #2, which corresponds to a region of the rat ERK-3 coding sequence, and was used designed as a 32 fold degenerate sequence from ERK1, ERK2 and
                                                                                                                                                                                                                                                                                                                                                                                            New antibody, useful for preparing a composition for treating extracellular signal regulated kinase - 5-associated diseases in a mammal e.g., diabetes mellitus, Alzheimer's disease or peripheral neuropathies.
             ss; antibody; extracellular signal regulated kinase-5; hERK-5; ERK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                         mitogen activated protein kinase; MAP kinase; hybridoma; diabetes mellitus; Alzheimer's disease; peripheral neuropathy; gene therapy; antidiabetic; neuroprotective; ERK-3; probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.6; DB 1; Length 21; 66.7%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                             (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 4 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ERK3 to detect the human ERK-5 cDNA clone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1156 ATGTGGGGTGTGGGCTGCATC 1176
                                                                                                                                                                                                                                                                                                                            Ullrich A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AYATKTGGKCTRGGCTGCATC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Col 38; 40pp; English
                                                                                                                                                                                                              99US-00393212.
                                                                                                                                                                                                                                             93US-00029404
                                                                                                                                                                                                                                                                95US-00459953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADD35311 standard; DNA; 21
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                                                                                                                                                                                                                                                                                                                              Lechner C, Moller NP,
                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-634515/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                             US6579972-B1
                                                                                                                                                                                                              09-SEP-1999;
                                                                                                                                                                                                                                             19-MAR-1993;
                                                                                                                                                                                                                                                              02-JUN-1995;
                                                                                                                                                                             17-JUN-2003
                                                                                                               Rattus sp.
                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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The reactions between molecular rargets and probe molecules compilisation which probe molecules are immobilised in predetermined regions. The base intoludes an opening for receiving the carrier and is optically cranical molecules are immobilised in predetermined regions. The base intoludes an opening for receiving the carrier and is optically controlly an opening for receiving the carrier is made of glass and/or silicon and the vessel is made of glass (optionally controlly proteins) and the plastics, glass ceramic, plastics or metal. Probes are controlly proteins (e.g. antibodies, peptides and/or hormones) or muclaic acids (DNA and/or RNA). The detection system is a camera, especially a charge-coupled device or CMOS camera, optionally fitted with an optical read-out system. The device may include a light source that ensures homogeneous controlled a light sources are lasers, LED, plane system. The device may include a light sources are lasers, LED, plane system. The device may include a light sources are lasers, LED, plane sources that are superimposed. These sources are lasers, LED, plane sources that are superimposed. These sources are lasers, LED, plane control unit and optionally a filter exchanger, a structured to ensure homogeneous illumination. The system preferably also contains optical filters and optionally a filter exchanger, a semperature control unit and a computer that collects signal intensities from the detector and converts them to an analogue image. The reaction contains on the probes and any interaction detected, e.g. from conventional labels are contacted with probes and the time progression of precipitation is detected as a signal intensity. Particularly a soluble precupitation is detected as a signal intensity progression of precipitation is detected as a signal intensity progression of precipitation is detected as a signal intensity progression of precipitation of a silver salt (nitrate, perparation may occur in the presence of a metal especially and probes and the precipitate. The new res
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a device for performing microarray tests, i.e. interaction of a target with protein, peptide or nucleic acid probes, e.g. for biomedical, including hybridisation or immunological, tests. The reaction vessel is of simple construction, is easy and inexpensive to make and is compatible with other laboratory apparatus (e.g. bench centrifuges and pipettes). Micro-array tests can be performed in a single vessel, reducing the risk of contamination and only relatively simple detectors are required. ADJ99048-ADJ99087 represent probes used to detect the cyp206 gene which encodes human cytochrome-P450 and are used to illustrate the method of
interactions between molecular targets and probe molecules comprising a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           probe; ss; chemical modification; methylation; array; CpG island; tumour suppressor; pl6; human; H69; H1618.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human DNA probe used to immobilise CpG methylated DNA SeqID 164.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.6; DB 1; Length 21; 31.0%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1588 TTCCGCGTGGTGGACACCGAG 1608
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADJ13037 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003152950-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-MAY-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADJ13037,
g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                            Human KIAA0172 gene encoding a sequence of 1194 amino acids, useful for diagnosis and treatment of cancer and for development of effective growth inhibitors of cancer cells.
                                                                                                                                                                                                                                                                                                                                                      The invention relates to new human KIAA0172 gene. The KIAA0172 gene and polypeptide are useful for detection and treatment of cancer. The present sequence represents KIAA0172 associated primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Reaction vessel, useful for detecting a specific interaction between a target and probe, e.g. in medical tests, comprises at its base a carrier for immobilized probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes a novel reaction vessel for detecting specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.6; DB 1; Length 21;
11.0%; Pred. No. 7.7e+02;
ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     detection; probe; microarray; hybridisation; cyp2D6; human; cytochrome-P450; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 10 A; 0 C; 8 G; 3 T; 0 U; 0 Other;
                                                                  DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= a
/mod_base= OTHER
/note= "5'-NH2 modification"
                                                                                                                                                                                                                                                                                                            Example 3; SEQ ID NO 47; 40pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CLON-) CLONDIAG CHIP TECHNOLOGIES GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1679 CCAACTACATCTTCCCTGCTT 1699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAACTACCTTTTCTCTT 1
                                                                                           INFO GENES CO LTD.
ZH KAZUSA DNA KENKYUSHO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human cyp2D6 probe G1749C-WT+4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADJ99056 standard; DNA; 21 BP
                      30-MAR-2001; 2001JP-00101401.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-JAN-2002; 2002DE-01001463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-JAN-2002; 2002DE-01001463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81.0%;
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                                                                                                                                                                  WPI; 2003-495749/47.
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Fischer J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADJ99056;
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                                                                                                                   (KAZU-)
                                                                    (DOKU-)
                                                                                             (INFO-)
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Gaps

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4; Indels

HANDER STANDARD STAND

Balog RP;

Luebke KJ,

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This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In
                                                                                                                                                                                                                     Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pi6 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                probe; ss; chemical modification; methylation; array; CpG island;
tumour suppressor; p16; human; H69; H1618.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human DNA probe used to immobilise CpG methylated DNA SeqID 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.6; DB 1; Length 21; ilarity 81.0%; Pred. No. 7.7e+02; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21 BP; 3 A; 12 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                      Example 1; SEQ ID NO 164; 210pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGATGAGAGTGGTGGTG 241
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                                           27-JUN-2001; 2001US-0301370P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-JUN-2002; 2002US-00184085
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADJ13737 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                          Minna JD,
                                                                          (GARN/) GARNER H R.
(MINN/) MINNA J D.
(LUEB/) LUEBKE K J.
(BALO/) BALOG R P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MINNA J D.
LUEBKE K J.
BALOG R P.
                                                                                                                                                                                       WPI; 2003-874843/81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
ses 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GARNER H R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003152950-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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                                                                                                                                                           Garner
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Matches
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This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA. Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA. Gaps ss; chemical modification; methylation; array; CpG island; suppressor; p16; human; H69; H1618. Human DNA probe used to immobilise CpG methylated DNA SegID 200. .. 0 Score 14.6; DB 1; Length 21; Pred. No. 7.7e+02; 0; Mismatches 4; Indels Sequence 21 BP; 3 A; 12 C; 1 G; 5 T; 0 U; 0 Other; Balog RP; Luebke KJ, Balog RP; Example 1; SEQ ID NO 864; 210pp; English Luebke KJ, 221 TGGATGAGAGTGGTGGTG 241 21 regargagagreggagagegg 1 BP 27-JUN-2002; 2002US-00184085. 0.8%; 27-JUN-2001; 2001US-0301370P ADJ13073 standard; DNA; 21 20-MAY-2004 (first entry) Query Match
Best Local Similarity 81.0. Minna JD, Garner HR, Minna JD, WPI; 2003-874843/81. probe; ss; chemical WPI; 2003-874843/81. (GARN/) GARNER H R. (MINN/) MINNA J D. (LUEB/) LUEBKE K J. BALO/) BALOG R P. US2003152950-A1. Homo sapiens. 14-AUG-2003 Garner HR, nvention. ADJ13073; tumour RESULT 668 ADJ13073/c à g .; 0

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RESULT 670
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                                          medified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pic from two human lung tumour cell lines HéS and Hills. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Analysis of chemical modification of DNA involves obtaining sample of to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.
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                                   This invention relates to a novel method for analysing chemically
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Example 1; SEQ ID NO 200; 210pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                               221 TGGATGAGAGTGGTGGTG 241
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LUEBKE K J.
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Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                                                                                                          Invention.
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probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human; ss; short interfering RNA; siRNA; angiogenesis; vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1; Flk-1/KDR; kinase domain region; diabetic retinopathy; age-related macular degeneration; inflammatory disease; psoriasis; rhemmatoid arthritis; cancer; breast; retinoblastoma; Wilm's tumour; lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
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Pred. No. 7.7e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 3 A; 13 C; 0 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGATGAGAGGGGGAGAGGTG 1
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14-NOV-2002; 2002US-00294228.
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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rheumatoid arthritis. Furthermore, it can be used to treat various

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ADQ30710/c

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Predicting antisense activity of an oligonuclectide for down-regulating expression of an RNA, comprises developing an artificial neural network, determining counts of mapped sequence motifs, and obtaining a output of
                                              DNA
         cancers including breast, retinoblastoma, Wilm's tumour and lymphoma. Accordingly, these compositions exhibit cytostatic, antidiabetic, ophthalmological, antidiflammatory, antipsoriatic, antirheumatic and antiarthritic activities. This oligonucleotide is a human Flk-1/KDR oligo, a target for siRNA inhibition of the invention.
                                                                                                                               Gaps
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                                                                                                       0.8%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 7.7e+02;
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                                                                               Sequence 21 BP; 11 A; 7 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                          Human ICAM-specific antisense oligonucleotide #3.
                                                                                                                              0; Mismatches
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                                                                                                                                                     972 ACACCGAGACCTCAAGCCCCA 992
                                                                                                                                                                          AAACCGAGACCTAAAAACCCCA 21
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Best Local Similarity 81.00, ..., ..., ...
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that contacts tissue and/or liquids of the human or animal body and is at least partly coated with a substance that mediates binding of biological materials. The new feature is that this substance is an aptamer. The device is particularly an implant, e.g. a stent, vascular prosthesis, heart valve, joint etc., but may also be a component of an extracorporeal circulation system, a nanomaterial for tissue engineering and vascular surgery, a catheter, contact lens, storage device for blood etc., also a bioreactor for isolation and culture of selected cell types, for production of substances or for growing organ replacements. The present sequence is an aptamer suitable for use in the device of the invention.
                                                                                                                                                                    Device with substance to aid adhesion of biological material aptamer #4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Device coated with aptamers for binding specific biological materials, useful e.g. as stent or component of extracorporeal circulation system, also new aptamers specific for endothelial precursor cells.
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ADQ30710 standard; DNA; 21 BP
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                                                                                                             23-SEP-2004
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                                                      ADQ30710;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 673
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Gaps

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Score 14.6; DB 1; Length 21; Pred. No. 7.7e+02; 0; Mismatches 4; Indels

0.8%;

TGAGAGTGGTGGTGGCGG 245

225 21

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reAcAccccAACTCCTCCCCC 1

셤

RESULT 672

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The sequences given in AAQ41767-825 represent sequences which are bound in an electrophoretic mobility shift assay (EMSA) by Myc. The isolated sequences contain the central E box core of CACGTG which binds very weakly with Myc homo-oligomers (CI complex), but more tightly with Myc hetero-oligomers (C2 complex). The C2 complex requires a 26-29 kD factor in addition to Myc. The additional factor copurifies with Myc and resembles Max protein. A second copurifying 40-50 kD factor has been identified (forming C2 complex). Sites selected by the C2' complex contain the core CAGCTG which bears remarkable homology to a myogenin binding site (see AAQ41763). Oligonucleotides containing the E box can bused in the purification of Myc from a mammalian source. See also AAQ41761-861. The isolated trarget sequences may be used in a method to himbiat c-Myc oncoprotein activity. (Updated on 25-MAR-2003 to correct PN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Identifying the nucleotide at specific position in a target sequence for detecting disease-related point mutations involves extending a primer that binds adjacent to the specific site to incorporate a labeled
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes a novel method for determining the identity of
                                        Prodn. of c-Myc protein from mammalian cells - and detection of c Myc inhibitors for use in cancer therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Detection; primer extension; point mutation; pathogenicity; therapy; cancer; genetic disease; polymorphism; apolipoprotein E; ApoE; human;
                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.6; DB 1; Length 22;
11.0%; Pred. No. 8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                        4; Indels
                                                                                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 6 A; 9 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human apolipoprotein E PCR primer Pl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1263 CCCAACTGAGGAGACGTGGCC 1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Col 9-10; 14pp; English
                                                                                             Disclosure; Fig 7a; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cccaacraagaccacciggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MOLE-) MOLECULAR TOOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ44872 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Syvanen A, Soederlund HE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                        17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-146544/13.
             WPI; 1993-167291/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  deoxynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-FEB-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                       field.
                                             Prodn.
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                                                                                                                                                                                                                                                                        The present invention relates to a device that has at least one surface that contacts tissue and/or liquids of the human or animal body and is at least partly coated with a substance that mediates binding of biological materials. The new feature is that this substance is an apcamer. The heart valve, joint etc., but may also be a component of an extracorporeal circulation system, a nanomaterial for tissue engineering and vascular surgery, a catheter, contact lens, storage device for blood etc., also a ploreactor for isolation and culture of selected cell types, for production of substances or for growing organ replacements. The present sequence is an aptamer suitable for use in the device of the invention.
                                                                                                                                                                           Device coated with aptamers for binding specific biological materials, useful e.g. as stent or component of extracorporeal circulation system, also new aptamers specific for endothelial precursor cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Myc; c-myc; mammalian; E box; cancer; therapy; C1; C2; C2'; complex; homo-oligomer; hetero-oligomer; myogenin; Max; oncoprotein; primer; probe; electrophoretic mobility shift assay; EMSA; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence 21 BP; 0 A; 14 C; 7 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag= a
/note= "C2 complex binding site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baculovirus C2 complex binding site #6.
                                                                               (UYTU-) UNIV TUEBINGEN EBERHARD-KARLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                           Claim 15; SEQ ID NO 2; 31pp; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         555 CCTCAGCGGCGGCCTCGGTCG 575
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%;
ilarity 81.0%;
Conservative 0
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               10-DEC-2003; 2003WO-EP013989
                                               17-DEC-2002; 2002DE-01058924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Papoulas 0;
                                                                                                                Schluesener H, Wendel H;
                                                                                                                                              WPI; 2004-517421/49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
nes 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-OCT-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein bind
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Gaps

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specific nucleotide at one or more defined sites in a target nucleic acid polymer involves formation of a detectable primer extension product if the specific nucleotide is present at the defined site in the target nucleic acid. The method is specifically used to detect point mutations which are associated with altered pathogenicity or resistance to therapy of a microrographism, particularly human immune deficiency virus or with cancer or a genetic disease (or susceptibility to it) in humans, but more generally can be used to detect mutations in RNA or DNA from animals, plants or microorganisms. By selecting a primer that binds adjacent to the specific site, variations at this site can be detected following incorporation of only a single dNTP. The method requires only a few, comporation of the proportion of mutated calls in a mixed population, down to 0.5% of this population. The method is easily automated. This sequence represents a PCR primer used to detect a polymorphism in human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                  Score 14.6; DB 1; Length 22;
Pred. No. 8e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                    Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Single nucleotide polymorphism PCR primer #1371.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (WHED ) WHITEHEAD INST BIOMEDICAL RES. (AFFY-) AFFYMETRIX INC.
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Sklar P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1301 AGGAGTTCAAGACATACAACT 1321
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGAGTTGAAGGCCTACAAAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAR-2000; 2000WO-US008440.
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                                                                                                                                                                                                                                                                                                                                                                                          81.0%;
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Patil N, S
                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 81.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                             apolipoprotein E (apoE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined primer sets, useful for subtyping or typing of HLA Class I alleles.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a method for the locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HIA)-A, HIA-B, or HIA-C alleles. The method is useful for subtyping of typing of HIA, class 1 alleles. The present sequence is an amplification primer used in the method
endocrine and neurological systems, such as coronary artery disease, schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
                                                                                                           Gaps
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18.2%; Pred. No. 8e+02;
ve 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                   Reverse primer #26 used for amplification of HLA-A exon 2.
                                                                                                         4; Indels
                                                                                 DB 1; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 22 BP; 1 A; 10 C; 7 G; 3 T; 0 U; 1 Other;
                                                      Sequence 22 BP; 9 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                               HLA-A; HLA-B; HLA-C; typing; primer; human; ss.
                                                                              0.8%; Score 14.6; DB 1
11.0%; Pred. No. 8e+02;
ve 0; Mismatches
                                                                                                                                     1497 CACTACTTCCATATTTGCACT 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rossau R;
                                                                                                                                                              21 CATTAATTACGTATTTGCACT 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            265
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                                                                                              Local Similarity 81.0%;
nes 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAS23687 standard; DNA; 22
                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22 TGHCCCGGGAGAGGCCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (INNO-) INNOGENETICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-647426/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
tes 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                  WO200061795-A2
                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-JUN-1999;
                                                                                                                                                                                                                                                                                          03-MAY-2001
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                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
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                            diseases
                                                                                 Query Match
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AAS23687/c
                                                                                                                                                                                                        RESULT 677
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  strains useful for identification and validation of gene products as targets for therapeutic agents, for creating a collection of identified essential genes, and screening assays for the discovery of new drugs. The invention provides the GRACE (gene replacement and conditional expression) method for the construction of mutant organisms referred to as GRACE strains of the organism. The invention can be applied to any organism, particularly a pathogenic fungus e.g. Candida albicans, Aspergillus fumigatus and Cryptococcus neoformans. The methods are useful to identify agents that may be used in the treatment of fungal infections, AAS23687-AAS23147 represent primers A #1-61 used as probes
                                                                                                         SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BDKRB1, tachykinin receptor B1, TACR1, C1 esterase inhibitor, CINH, kallikrein 1, KLK1, bradykinin receptor B2, BDKRB2, gene therapy; angiotensin converting enzyme 2, ACE2, protease inhibitor 4, PI4, polymorphism, haemangioma, tumour; sarcoma, Crohn's disease, trachoma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present invention relates to novel methods for constructing fungal
                                                                                    Gene identification; essential gene; GRACE; pathogenic fungus; gene replacement and conditional expression; fungal infection; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cardiovascular disease; angina pectoris; hypertension; heart failure; myocardia infarction; ventricular hypertroph; vascular disease; aneurysm; embolism; thrombosis; coronary artery disease; angioedaema; arteriosclerosis; atherosclerosis; hypersensitivity; sepsis; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ss; aminopeptidase P; XPNEP2; bradykinin receptor B1; primer; tachvkinin receptor B1; TACR1; Cl esterase inhibitor; ClNH;
                                                   Primer A #1 used as probe for identifying C. albicans GRACE strain.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying genes essential to fungal metabolisms and identifying potential therapeutic agents that target these genes.
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Pred. No. 8e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human automated genomic bit analysis (GBA) PCR primer #37.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for identifying C. albicans GRACE strains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 301; 324pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGATGAAGAAGATCAAACGG 150
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                                                                                                                                                                                                                                                                                                                                                                          Boone C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%;
                                                                                                                                                                                                                                                                  20-FEB-2001; 2001WO-US005551
                                                                                                                                                                                                                                                                                                     18-FEB-2000; 2000US-0183534P.
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                  04-DEC-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                        (ELIT-) ELITRA PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                          T, Jiang B,
                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-489080/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
les 17; Conserv
                                                                                                                                          Candida albicans
                                                                                                                                                                                                WO200160975-A2.
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                                                                                                                                                                                                                                   23-AUG-2001
                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            130
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                                                                                                                                                                                                                                                                                                                                                                           Roemer
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The invention relates to an isolated nucleic acid from a human gene encoding aminopeptidase P (TRNRP2), bradykinin receptor B1 (TRNRP2), cleaterase inhibitor (CINH), kallikrein tachykinin receptor B1 (TACR1), Cleaterase inhibitor (CINH), kallikrein (CC (CC)), bradykinin receptor B2 (TACR2), cn protesse inhibitor 4 (FT4), comprising at least one polymorphic position. Also included are (1) a probe that hybridises to a polymorphic position. Also included are (1) a probe that hybridises to a polymorphic position. Also included are (1) a probe that hybridises to a polymorphic position. Also included are (1) a probe that hybridises to a polymorphic position as provided in the detailed summary of single nucleotide polymorphisms comprising additional s and 3' flanking genomic sequence; (2) analysing (M1) at least one nucleic acid sample comprising control of analysing (M3) an individual at risk of developing a brotein selected from the group above; (3) constructing (M2) and individual at risk of developing a disorder using the polymorphic data; (5) a library of nucleic acids, each of which comprises one or more polymorphic positions within a gene encoding a protein selected from the group above; and (6) genotyping (M4) and individual comprising obtaining a nucleic acids, each of which individual comprising obtaining a mucleic acids, each of which individual comprising obtaining a mucleic acids and (6) genotyping (M4) and individual comprising obtaining and score acid sample, determining the mucleotide present in at least one polymorphic position, and comparing at least one polymorphic position, and comparing and compositions are useful for detecting, dispenses, (M1, M2, M3 and M4) and compositions are useful for detecting, dispenses which involve angiogenesis like haemangiomas, tumours, sarcomas, Crobu's or preventing various disorders such as angiocedaema and diseases which involve angiogenesis like haemangiomas, tumours, sarcomas, Crobu's and hyperreophy vascular dissease, anteriosclarosis, and composition, vanet, wo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polymuclectides are also useful for chromosome identification. Antibodies against the proteins may be utilised for immunophenotyping of cell lines and biological samples. The present sequence is a genotyping PCR primer for the gene encoding one of the proteins listed above, using the method of automated genetic bit analysis, GBA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        useful
autoimmune disease; inflammatory arthritis; cancer; wound; genotyping; viral infection; bacterial infection; fungal infection; COPD; GBA; Chronic obstructive pulmonary disease; enterocolitis; automated genetic bit analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   isolated nucleic acid with at least one polymorphic position, use detecting, diagnosing and treating disorders such as angioedema, cer, viral, bacterial or fungal infection, cardiovascular and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zerba KE, Ma-Edmonds M, Perrone MH;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BRIM ) BRISTOL-MYERS SQUIBB CO. (TSUC/) TSUCHIHASHI Z.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-2000; 2000US-0251015P.
23-JAN-2001; 2001US-0263678P.
02-MAR-2001; 2001US-0273037P.
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Powell JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer, viral, bacte
autoimmune diseases.
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                                                                                                                                                                                                                                                                                                                                                           WO200261131-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HUIL/) HUI L.
                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Swanson BN,
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Sequence 22 BP; 3 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

ö Gaps ; Length 22; 4; Indels DB 1; 8e+02; Score 14.6; D Pred. No. 8e+0 0; Mismatches 81.0%; 17; Conservative Query Match Best Local Similarity Matches

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ABZ29860 standard; DNA; 22

ABZ29860;

30-JAN-2003 (first entry)

Candida albicans GRACE strain PCR primer SEQ ID NO 4011.

Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis; signal transduction; DNA replication; cell division; growth; proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.

Candida albicans

WO200253728-A2.

11-JUL-2002

26-DEC-2001; 2001WO-US049486.

29-DEC-2000; 2000US-0259128P. 20-FEB-2001; 2001US-00792024. 22-AUG-2001; 2001US-0314050P.

(ELIT-) BLITRA PHARM INC.

Boone C, Roemer T, Jiang B,

Bussey H, Ohlsen KL;

WPI; 2002-566694/60.

Constructing strains for identifying gene products as effective targets for therapeutic intervention, by inactivating in the strain one allele of a gene and placing other allele of the gene under conditional expression.

Claim 36; SEQ ID NO 4011; 167pp + Sequence Listing; English.

The invention relates to constructing (M1) a strain of diploid fungal cells in which both alleles of a gene are modified, comprising modifying one allele by insertion or replacement by a cassette having an expressible selectable marker and modifying other allele by recombination, of a promoter replacement fragment with a heterologous promoter, so that expression of the second allele is regulated by the promoter. (M1) is useful for constructing a strain of diploid fungal cells in which both alleles modified are useful for identifying a gene that cells having both alleles modified are useful for identifying a gene that is essential to the survival or growth of a fungus, a gene that contributes to the virulence and/or pathogenicity of a fungus, a gene that contributes to the resistance of a diploid fungus to an antifungal agent, an antifungal agent that inhibits the growth of a fuploid fungus or and for identifying a therapeutic agent for treatment of a mammalian agent, an antifungal agent that inhibits the growth of a diploid fungus compound values to the virulence, preferably ensymatic activity, carbon catabolism, biosynthetic, transporter, transcriptional, compound catabolism, biosynthetic, transporter, transcriptional, compound catabolism, signal transduction, DNA replication and cell division activity. The method is useful for identifying a compound having the ability to inhibit growth or proliferation of c. albicans cells and for translating infection by C. albicans. The present sequence data for this patent is not represented in the printed specification but is based to sequence information supplied to Derwent by the European Patent Office on sequence information supplied to Derwent by the European Patent Office ABEZ29860, XXX
ABEZ29860, XXX
ABEZ29860, XXX
ABEZ2 ABEZ2 XXX
ABEZ2 ABEZ2 XXX
ABEZ2 ABEZ2

Sequence 22 BP; 3 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

٠. Gaps .. 0.8%; Score 14.6; DB 1; Length 22; 11.0%; Pred. No. 8e+02; ve 0; Mismatches 4; Indels 81.0%; 17; Conservative Best Local Similarity Matches 17; Conserv Query Match

150 CGAATCAAGATGATCAAACAG 2 130 CGGATGAAGAAGATCAAACGG

ð 윱 RESULT 6

ABN88966 standard; DNA; 22 BP

ABN88966;

(first entry) 22-AUG-2002

Human NOV1 forward PCR primer SEQ ID NO:14.

Human; NOV1; NOVX; endozepine-related protein precursor-like protein, cytostatic; antiarteriosclerotic; antidiabetic; anti-HUV; antiarteriosclerotic; antidiabetic; anti-HUV; antiarthmatic; anti-inflammatory; haemostatic; hypotensive; neuroprotective; anorectic; nootropic; antidepressant; immunosuppressive; analgesic; cardiant; gastrointestinal; antilipaemic; gene therapy; cancer; Alzheimer's disease; stroke; tuberous sclerosis; parkinson's disease; hypercalcaemia; Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome; multiple sclerosis; ataxia-telangiectasia; leukodystrophy; addiction; anxiety; depression; neurodegenrative disorder; stress; immune disorder; alcoholism; obseity; diabetes; haematopoletic disorder; dyslipidaemia; wasting disorder; PCR primer; ss.

Homo sapiens.

WO200234782-A2

02-MAY-2002.

23-OCT-2001; 2001WO-US046005

23-OCT-2000; 2000US-0242485P. 22-JAN-2001; 2001US-0263339P. 29-JAN-2001; 2001US-0264850P. 22-OCT-2001; 2001US-03568P.

(CURA-) CURAGEN CORP.

Ellerman K; Vernat CAM; Gerlach V, Macdougall JR, Millet I, Gunther E, Grosse WM, Alsobrook JP, Lepley DM, Burgess CE, Shenoy S, Spytek KA, Mishra V, Padigaru M;

WPI; 2002-479708/51.

New NOVX or NOV1 polypeptides and nucleic acids, useful for preventing or treating NOVX-associated disorders e.g. cardiomyopathy, atherosclerosis, cancer, Huntington's disease or Alzheimer's disease.

Example 2; Page 96; 124pp; English.

The present invention describes human NOV1 (an endozepine-related protein precursor-like protein). Human NOV1 maps to human chromosome 10. NOV1 has evtostatic, antiatrefroscalerotic, antidabetic, haemostatic, anti-HIV, antiatrefroscalerotic, antidabetic, haemostatic, anti-HIV, antiatrefroscaleroty, hypotensive, neuroprotective, anciental antidepressant, immunosuppressive, tranquilliser, analgesic, cardiant, gastrointestinal, anticonvulsant, immunomodulator, antialcoholic and antilipaemic activities, and can be used in gene therapy. NOVX nucleic acids, polypeptides and antibodies are useful for treating or diagnosing diseases such as cancers, Von Hippel-Lindau syndrome, Alzhaimer's disease, stroke, tuberous sclerosis, Parkinson's disease, hypercalcaemia, Huntington's disease, cerebral palsy, epilepsy, lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangictasia, pain, leukodystrophies, behavioural disorders, addiction, anxiety, depression,

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                                                                                              Matches
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The PCR was used to characterise metabolic enzyme induction by vitamin D malogues, corticosteroids and macrolactams in human skin. The invention provides for the use of antagonists of P450 enzymes for the prevention or alleviation of a tachyphylactic response to administration of a vitamin D analogue, corticosteroid or macrolactam to a patient, e.g. for the reatment of psoriaais. The underlying cause of tachyphylaxis was shown or receptor down-regulation. Exposure of a patient to the drug for extended periods results in an increase in the expression of enzymes which are capable of metabolizing the drug. A method for treatment of tachyphylaxis therefore involves inhibiting the induced metabolic enzyme. Sepecially a P450 cytochrome, by administration of an antagonist of the enzyme. Detection of an increase in the amount and/or activity of a metabolic enzyme capable of metabolizing a drug following extended exposure of a cell from an individual to the drug indicates the increased likelihood of that individual developing a tachyphylactic response to the
                                                                                                                                                                                                      ö
neurodegenerative disorders, stress, immune disorders, alcoholism, obesity, diabetes, haematopoietic disorders, dysliptdaemias, and wasting disorders associated with chronic diseases. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit e.g. neurogenesis, cell proliferation, etch differentiation, haematopoissis, wound healing and angiogenesis. The present sequence represents a PGR primer for human NOVI, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alleviating or preventing a tachyphylactic response to an agent and treating psoriasis, comprises administering an antagonist of a metabolic enzyme, which is induced as a result of exposure to the agent, to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytochrome P450; CYP27A1; enzyme; tachyphylaxis; drug tolerance; human; psoriasis; antipsoriatic; antipruritic; dermatological; PCR; primer; ss
                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ward S;
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                                                                                                                                                                         DB 1; Length 22;
                                                                                                                                                                                                      4; Indels
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                                                                                                                                           Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                        Query Match 0.8%; Score 14.6; DB 1
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytochrome P450 CYP27Al antisense primer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 75; 136pp; English.
                                                                                                                                                                                                                                    886 GGGAACATCATCAACATGCAC 906
                                                                                                                                                                                                                                                                 GGCAAAATCATCAACATCAAC 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MOLE-) MOLECULAR SKINCARE LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2000; 2000GB-00029524.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-DEC-2001; 2001WO-GB005369.
                                                                                                                                                                                                                                                                                                                                            ABQ81301 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                         12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-JUN-2002
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                                                                                                                                                                                                                                                                                                                                                                           ABQ81301;
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                                                                                                                                                                                                                                                                                                                 RESULT 682
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A new acid protease in which the serine residue participates to activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Acid protease; PCR; primer; ss; digestive enzyme; protein hydrolysis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Acid protease; PCR; primer; ss; digestive enzyme; protein hydrolysis; drug production; food production; enzyme.
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                                                                                               Gaps
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                                               DB 1; Length 22;
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                                                                                            4; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bacillus sp novel acid protease PCR primer D165-S.
Sequence 22 BP; 5 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22 BP; 5 A; 7 C; 8 G; 2 T; 0 U; 0 Other;
                                             Score 14.6; DB 1
Pred. No. 8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                            0; Mismatches
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                                                                                                                                               864 GAAGCAGTACCTGGATGACTG 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 4; Page 8; 25pp; Japanese
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                                                                                                                                                                                         21 GAAGCGATACCTGGATGGTTG 1
                                                                                                                                                                                                                                                                                                                  BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81,0%;
                                                                      81.0%;
                                                                                                                                                                                                                                                                                                                  AAL43364 standard; DNA; 22
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                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17; Conservative
                                                                                               17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DAIW ) DAIWA KASEI KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-430301/46
                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JP2002078489-A.
                                                                                                                                                                                                                                                                                                                                                                                                               22-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bacillus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       expression.
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VI;

Miller CE;

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Lesch-Nyhan syndrome; ataxià-telangiectasia; pain; depression; stress and
diabetes. The present DNA sequence represents a NOV2 gene PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; PCR; primer; ss; gene therapy; vaccine; NOVI; NOVOX; cancer; neurodegenerative disorder; immune disorder; haematopoietic disorder; dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain; Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy; tubercous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy; Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;
                                                                                                                                                                                                         The invention comprises the amino acid and coding sequences of human NOVOX (NOV1 and NOV2) proteins. The NOVOX proteins of the invention are useful for identifying an agent (a cellular receptor or downstream effector) that binds to a NOVOX protein. The NOVOX DNA and protein sequences of the invention are useful for the treatment (gene therapy) opervention (vaccine) of: cancer, neurodegenerative disorders; immune disorders; haematopoietic disorders; dyslipidaemia, obesity; metabolic syndrome X; wasting disorders; von Hippel-Lindau (VHL) syndrome;
                                                                                             Novel cytoplasmic, nuclear, membrane bound and secreted NOVX polypeptides, useful for treating cancers, neurodegenerative disorders, immune disorders, hematopoietic disorders, diabetes and metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Macdougall JR, Millet I, Ellerman K, Stone DJ;
Grosse WM, Alsobrook JP, Lepley DM, Reiger DK,
Caman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;
Patturajan M, Shenoy SK, Rastelli L, Tchernev VT;
                                                                                                                                                                                                                                                                                                                                          Alzheimer's disease; stroke; tuberous sclerosis; hypercalcaemia;
Parkinson's disease; Huntington's disease; cerebral palsy; epile
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 14.6; DB 1; Length 22;
Pred. No. 8e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
Shenoy SK, Rastelli L,
Malyankar UM, Guo X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human NOV1 gene PCR primer: SEQ ID NO 18.
                                                                                                                                                                            Example 3; Page 130; 155pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     886 GGGAACATCATCAACATGCAC 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCAAAATCATCAACATCAAC 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0253834P.
2001US-0264180P.
2001US-0313656P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               depression; stress; diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAL43762 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 81.0%
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   Patturajan M,
Zerhusen BD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CURA-) CURAGEN CORP.
                                                              WPI; 2002-527702/56.
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20-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Edinger SR,
Gerlach VL,
Burgess CE,
Mishra V, Pa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
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                              Gangolli EA;
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                  CAM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-JUN-2002.
                                                                                                                                                disorders.
 Mishra V,
Vernet CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAL43762;
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     셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                      The invention comprises the amino acid and coding sequences of two novel Bacillus sp acid proteases. The novel acid proteases of the invention are useful as digestive enzymes for the hydrolysis of proteins in drugs and foods. The present DNA sequence represents a PCR primer that is specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; PCR; primer, ss; gene therapy; vaccine; NOV2; NOVOX; cancer; neurodegenerative disorder; immune disorder; haematopoietic disorder; dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain; Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy; tuberous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy; Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;
                                                                                                                                                                                                                                                           A new acid protease in which the serine residue participates to activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JR, Millet I, Ellerman K, Stone DJ;
Alsobrook JP, Lepley DM, Reiger DK;
Spytek KA, Boldog FL, Li L, Padigaru M;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                        for the gene sequence of a Bacillus sp acid protease
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 22 BP; 1 A; 9 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.6;
81.0%; Pred. No. 8e
   food production; enzyme.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human NOV2 gene PCR primer: SEQ ID NO 39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1466 GTCTGGGGGGGGGATCCACA 1486
                                                                                                                                                                                                                                                                                                            Example 4; Page 8; 25pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCGGGGCCAGCGGATCCACA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAL43783 standard; DNA; 22 BP.
                                                                                                                               04-SEP-2000; 2000JP-00267840.
                                                                                                                                                             04-SEP-2000; 2000JP-00267840.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-JAN-2001; 2001US-02641B0P.
20-AUG-2001; 2001US-0313656P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              depression; stress; diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Macdougall J
Grosse WM,
Casman SJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CURA-) CURAGEN CORP.
                                                                                                                                                                                           (DAIW ) DAIWA KASEI
                                                                                                                                                                                                                           WPI; 2002-430301/46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
   drug production;
                                                               JP2002078489-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Edinger SR,
Gerlach VL,
Burgess CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-SEP-2002
                              Bacillus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-JUN-2002
                                                                                               19-MAR-2002
                                                                                                                                                                                                                                                                          expression.
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Gaps

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or

palsy; epilepsy;

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25-JAN-2001; 2001US-0264180P.
20-AUG-2001; 2001US-0313656P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-NOV-2001; 2001WO-US048842.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                              17; Conservative
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                          WPI; 2002-527702/56.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-JUN-2002
                                                                                            disorders
Gangolli
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                                                     Novel
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                                                                                                                                                        The invention comprises the amino acid and coding sequences of human NOVOX (NOV1 and NOV2) proteins. The NOVOX proteins of the invention are useful for identifying an agent (a cellular receptor or downstream effector) that binds to a NOVOX protein. The NOVOX DNA and protein sequences of the invention are useful for the treatment (gene therapy) or prevention (vaccine) of: cancer; neurodegenrative disorders; immune disorders; hasmatopoietic disorders; von Hippel-Lindau (VHL) syndrome; Alzheimer's disease; stroke; tuberous sclerosis; hypercalcaemia; hzheimer's disease; stroke; tuberous sclerosis; hypercalcaemia; larkinson's disease; Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome; ataxia-tellangiectasia; pain; depression; stress and diabetes. The present DNA sequence represents a NOVI gene PCR primer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; PCR; primer; ss; gene therapy; vaccine; NOVI; NOVOX; cancer; neurodegenerative disorder; immune disorder; haematopoietic disorder; dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain; Von Hippel-Lindau syndrome; Alzheimer's disease; trroke; cerebral palsy; tuberous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy; Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;
                                                                              neurodegenerative disorders,
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Macdougall JR, Millet I, Ellerman K, Stone DJ;
Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;
Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;
Atturajan M, Shenoy SK, Rastelli L, Tchernev VT;
Zerhusen BD, Malyankar UM, Guo X, Miller CE;
                                                                              polypeptides, useful for treating cancers, neurodegenerative disoimmune disorders, hematopoietic disorders, diabetes and metabolic
                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                   membrane bound and secreted NOVX
 Miller CE;
                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.6; DB 1; Length 22;
                                                                                                                                                                                                                                                                                                                                                                                           4; Indels
                                                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
 Guo X,
                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 8e+02;
; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human NOV1 gene PCR primer: SEQ ID NO 33.
 Malyankar UM,
                                                                                                                                    Example 3; Page 110; 155pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                     886 GGGAACATCATCAACATGCAC 906
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25-JAN-2001; 2001US-0264180P.
20-AUG-2001; 2001US-0313656P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Huntington's disease; Lesch-N
depression; stress; diabetes.
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                                                                                                                                                                                                                                                                                                                                                                              81.0%;
                                                                    cytoplasmic, nuclear,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAL43777 standard; DNA; 22
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Patturajan M, S
Zerhusen BD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
 Zerhusen BD,
                                                                                                                                                                                                                                                                                                                                                                                           17; Conservative
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                                         WPI; 2002-527702/56.
                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
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Gerlach VL,
Burgess CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mishra V, F
Vernet CAM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-SEP-2002
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             Gangolli EA;
                                                                                                          disorders.
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    Vernet
                                                                    Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 687
                                                                                                                                                                                                                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                  The invention comprises the amino acid and coding sequences of human NOVOX (NOV1 and NOV2) proteins. The NOVOX proteins of the invention are useful for identifying an agent (a cellular receptor or downstream effector) that binds to a NOVOX protein. The NOVOX DNA and protein sequences of the invention are useful for the treatment (gene therapy) opervention (vaccine) of: cancer; neurodegenerative disorders; immune disorders; haematopoietic disorders; neurodegenerative disorders; immune syndrome X; wasting disorders; von Hippel-Lindau (VHL) syndrome; Alzheimer's disease; stroke; tuberous sclerosis; hypercalcaemia; Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy; lesch-Myhan syndrome; attaxia-telangiectasia; pain; depression; stress andiabetes. The present DNA sequence represents a NOVI gene PCR primer
Novel cytoplasmic, nuclear, membrane bound and secreted NOVX polypeptides, useful for treating cancers, neurodegenerative disorders, immune disorders, hematopoietic disorders, diabetes and metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human NOV2 gene PCR primer: SEQ ID NO 51.
                                                                                                                                                                                                                                                            Example 3; Page 111; 155pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       886 GGGAACATCATCAACATGCAC 906
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The invention comprises the amino acid and coding sequences of human NOVOX (NOV1 and NOV2) proteins. The NOVOX proteins of the invention are useful for identifying an agent (a cellular receptor or downstream effector) that binds to a NOVOX protein. The NOVOX DNA and protein sequences of the invention are useful for the treatment (gene therapy) or prevention (vaccine) of: cancer; neurodegenerative disorders; immune disorders; hammacopoietic disorders; Von Hippel-Lindau (VHL) syndrome; Alzheimer's disease; stroke; tuberous sclerosis; hypercalcaemia; Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome; ataxia-telangiacitasia; paln; depression; stress and diabetes. The present DNA sequence represents a NOV2 gene PCR primer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOVX; autoimmune disease; allergy; Alzheimer's disease; stroke; Parkinson's disease; Huntington's disease; multiple sclerosis; addiction; anxiety; pain; diabetes; glomerulonephritis; obesity; systemic lupus erythematoeus; asthma; scleroderma; pancreatitis; graft versus host disease; ulcer; anaemia; cancer; trauma; infection; cardiomyopathy; atherosclerosis; hypertension; AlDS; Crohn's disease; acquired immunodeficiency syndrome; chromosomal mapping; tissue typing; forensic biology; predictive medicine; gene therapy; human; PCR; primer;
                                                          polypeptides, useful for treating cancers, neurodegenerative disorders, immune disorders, hematopoietic disorders, diabetes and metabolic disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                  cytoplasmic, nuclear, membrane bound and secreted NOVX
                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.6; DB 1; Length 22;
11.0%; Pred. No. 8e+02;
ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               8e+02;
~~~ 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                   Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel human protein associated PCR primer #6.
                                                                                                                                 Example 3; Page 130; 155pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   886 GGGAACATCATCAACATGCAC 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCAAATCATCAACATCAAC 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001US-0296404P
2001US-0296418P
2001US-0296578P
2001US-0297414P
2001US-0297567P
2001US-0299538P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001US-0299230P.
2001US-0299949P.
                                                                                                                                                                                                                                                                                                                                                                                                                                   81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACD13238 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-AUG-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 81.0
ses 17; Conservative
                 WPI; 2002-527702/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200298900-A2
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                                                  Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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The invention describes an isolated NOVX polypeptide (I) comprising a sequence selected from a sequence (S1) of 1121, 635, 299, 1720, 176, 583, C2 214, 395, 1098, 134, 477, 133, 407, 806, 804, 1253, 399, 1320, 135, 240, 1069, 116, 499, 1138, 477, 316, 269, 219, 205, 406, 460, 365, 380, 829 or 326 amino acids fully defined in the specification, and the mature form of S1. (I) is useful for treating or preventing a pathology associated with (I) in a subject, preferably thuman, or for identifying an agent that binds to (I), where the agent is compared to a cellular receptor or a downstream effector. (I), a polymorleotide (II) encoding (I) or an anti-(I)-antibody (V) is useful treating or preventing disorders or syndromes such as autoimmune disease, allergies, Alzheimer's concording (I) or an anti-(I)-antibody (V) is useful treating or preventing disorders or syndromes such as autoimmune disease, allergies, Alzheimer's colleases, stroke, parkinson's disease, Huntington's disease, multiple sclerosis, addiction, anxiety, pain, diabetes, glomentlonephritis, systemic lupus erythematosus, asthma, scleroderma, graft versus host disease, pancreatitis, obesity, ulcers, anaemia, cancer, trauma, viral, colsease, pancreatitis, obesity, ulcers, anaemia, cancer, trauma, viral, disease, (I), (II) or (V) is useful in screening assays, correption assays completing (e.g., diagnostic assays, prognostic assays, monitoring clinical trails and pharmacogenomic), and in methods of treatment (e.g., diagnostic assays, prognostic assays, prognostic assays, to express
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ic and prophylactic). (II) is useful in gene therapy, to express letect NOVX mRNA or a genetic lesion in a NOVX gene, and to NOVX activity. This sequence represents a primer used to isolate
                                                                                                                                                                                                                                                                                                                                                                                                               Novel isolated NOVX polypeptide useful treating or preventing disorders or syndromes such as autoimmune disease, allergies, Alzheimer's disease, stroke, Parkinson's disease, Huntington's disease or multiple sclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
                                                                                                                                                                                                                                                              Miller CE, Hjalt T;
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                                                                                                                                                                                                                                                         Kekuda R, Spytek KA, Shenoy SG, Miller CE, Hjalt J
Baumgartner JC, Guo X, Gangolli EA, Vernet CAM;
Li L, Pena CEA, Gorman L, Anderson DW, Edinger SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 to detect NOVX mRNA or a genetic lesion in a NOVX gene,
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                                                                                                                                                                                                                                         Spytek KA, sr
quo X,
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                  26-JUN-2001; 2001US-0300883P.
28-JUN-2001; 2001US-0301530P.
28-JUN-2001; 2001US-0301550P.
03-JUL-2001; 2001US-0302951P.
                                                                                                        12-SEP-2001; 2001US-0318727P.
27-SEP-2001; 2001US-0325685P.
                                                                                                                                                   2002US-0358814P
                                                                                                                                                                       03-JUN-2002; 2002US-00161927
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                                                                                                                                                                                                                                                                                                         Padigaru M, Li L, Pena
Patturajan M, Stone DJ;
                                                                                                                                                                                                                   (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-140585/13
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                                                                                                                                                                                                                                                                                    Gerlach VL,
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AXBXBXBXB
AXBXBXBXB
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02-APR-2002; 27-SEP-2001; 17-OCT-2001; 14-NOV-2001; 21-NOV-2001; L4-NOV-2001; 16-JAN-2002; 04-DEC-2001 Guo X,

hypertension; congenital heart defect; aortic stenosis; valve disease; atrial septal defect; atrioventricular canal defect; ductus arteriosus; pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD; tuberous sclerosis; scleroderma; atherososis; infectious disease; obesity; anorexia; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; immune disorder; haematopoietic disorder; primer; haemophilia; hypercoagulation; Crohn's disease; 2001US-0282020P.
2001US-0282330P.
2001US-0283312P.
2001US-0283312P.
2001US-0283312P.
2001US-0284234P.
2001US-0285381P.
2001US-0285609P.
2001US-0285609P.
2001US-0285609P.
2001US-0285609P.
2001US-0285609P.
2001US-0285609P. 2001US-0288257P 2001US-0294164P 2001US-029464P 2001US-0299237P 2001US-0299276P 2001US-0318750P 2001US-032480P 2001US-032480P 2001US-032480P 2001US-032480P 2001US-032480P 2001US-0281136P. 2001US-0281863P. 2001US-0281906P. 03-APR-2002; 2002WO-US010780 WO200281498-A2 10-APR-2001; 7-APR-2001; 23-APR-2001; 23-APR-2001; 27-APR-2001; 29-MAY-2001; 19-JUN-2001; Homo sapiens APR-2001; 12-APR-2001; 19-APR-2001; 20-APR-2001; 20-APR-2001; 24-APR-2001; APR-2001; 02-MAY-2001; L8-JUN-2001; 19-JUN-2001; 12-SEP-2001; 25-SEP-2001; 25-SEP-2001;

(CURA-) CURAGEN CORP.

2002US-0350251P 2002US-00114270

2001US-0332240P 2001US-0332779P

Kekuda R, Miller CE, Malyankar UM, Spytek KA; jan M, Liu X, Gusev VY, Li L, Vernet CAM, Zerhusen BD; L, Shenoy SG, Pena CEA, Smithson G, Burgess CE, Gerlach V; Shenoy SG, Agangoli EA, Taupier RJ, Casman SJ, Ji W; n DW, Leite MW, Rastelli L, Edinger SR, Stone DJ; all JR, Rothenberg ME, Mazur A, Millet I, Peyman JA; Gorman L, Sheno Padigaru M, Shii Anderson DW, Le Macdougall JR,] Patturajan M, Ellerman K;

WPI; 2003-046858/04.

New isolated NOVX polypeptide useful for treating atherosclerosis, metabolic disorders, diabetes, obesity, infectious disease, anorexia, neurodegenerative disorders, Alzheimer's disease and cancer.

Example 83; Page 368; 666pp; English.

The invention relates to human polypeptides, termed NOVX, and the

ö polynucleotides encoding them. The polypeptides and polynucleotides are useful for diagnosing disease, and screening for potential therapeutic agents. The sequences are useful for treating metabolic disorders, cardiomyopathy, diabetes, hypertension, congenital heart defects, arterious, attrains septal defect (ASD), attrioventricular canal defect, ductus arterious, pulmonary stenosis, subaoritic stenosis, ventricular septal defect (VSD), valve diseases, tuberous sclerosis, scleroderma, atherosclerosis, obesity, infectious disease, anoraxia, neurodegenerative disorders, Alzheimer's disease, parkinson's disease, immune disorders, haemacopoietic disorders, haemophilia, hypercoagulation, Crohn's disease, and cancer. This sequence represents a PCR primer used to amplify a human New histone deacetylase 9 polypeptide, useful for screening for candidate compounds that share a, bind to, or inhibits the histone deacetylase 9 biological activity, and for diagnosing or prognosing cancer, e.g. deacetylase (HDAC) activity. Polypeptides and nucleic acids of the invention are useful for screening for candidate compounds that share, bind to, or inhibit histone deacetylase 9 (HDAC9) biological activity, and for diagnosing or prognosing cancer, e.g. leukaemia such as TEL-AML1 postitive and negative pre-B cell acute lymphoblastic leukemia or B cell lymphoma. The current sequence the human HDAC9 exon 4 alternative 5' splice donor consensus sequence Gaps Human HDAC9 exon 4 alternative 5' splice donor consensus sequence. Human; HDAC9; histone deacetylase 9; enzyme; cytostatic; cancer; invention relates to an isolated polypeptide having histone ·. 0.8%; Score 14.6; DB 1; Length 22; 11.0%; Pred. No. 8e+02; 4; Indels Sequence 22 BP; 8 A; 4 C; 8 G; 2 T; 0 U; 0 Other; Seguence 22 BP; 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other; 0; Mismatches NOVX polynucleotide of the invention Disclosure; Page 44; 71pp; English. 600 IGGGAAACIGGAGACCIACAI 620 TAGGAAAATGGACGCCTACAT 22 Ē BP. 02-OCT-2001; 2001GB-00023664. Guidez 02-OCT-2002; 2002WO-GB004455 81.0%; ACC80005 standard; DNA; 22 (first entry) 17; Conservative (CANC-) CANCER RES INST. (ZELE/) ZELENT A. (PETR/) PETRIE K. (GUID/) GUIDEZ F. Petrie K, WPI; 2003-381634/36. Best Local Similarity WO2003029451-A2. leukaemia; ds. Homo sapiens. 25~JUL-2003 10-APR-2003. Zelent A, ACC80005; Query Match 691 Matches ACC80005 222222222222222222 셤 ò

Gaps

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Indels

4 ;

Mismatches

0

17; Conservative

Matches

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Gaps

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The present invention describes an isolated nucleic acid molecule (I) comprising a nuclectide sequence of Drosophila melanogaster, human or mouse microRNAs (miRNAs), or their precursors, a complement of it, a nuclectide sequence that has an affinity of at least 80 % to them or a nuclectide sequence that has an affinity of at least 80 % to them or a nuclectide sequence that hybridises under stringent conditions to them Also described: (1) a pharmaceutical composition containing the nucleic acid and, optionally, a carrier; and (2) identifying miRNA molecules or precursor molecules, comprising ligating 5'- and 3'-adapter molecules to the ends of a size-fractionated RNA population, reverse transcribing the adapter-containing RNA population and characterising the reverse transcribing the gene therapy. The pharmaceutical composition is useful for diagnostic and therapeutic applications, and as a marker or a modulator of developmental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acid molecule for diagnostic and therapeutic applications and as a marker or a modulator of developmental or pathogenic processes, e.g. cancer, comprises microRNAs of a Drosophila melanogaster, a human or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or pathogenic processes, particularly of cancer (e.g. B-cell chronic leukaemia) or gene expression. The miRNA molecules may also be used in tissue reprogramming procedures. The present sequence represents an miRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Drosophila melanogaster; human; mouse; microRNA; miRNA; cytostatic; gene therapy; diagnostic; therapeutic; developmental modulator; pathogenic modulator; cancer; B-cell chronic leukaemia;
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       DB 1; Length 22;
                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mouse and human miRNA sequence miR-C30 SEQ ID NO:213.
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0.8%; Score 14.6; DB 1
81.0%; Pred. No. 8e+02;
live 0; Mismatches
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                                                                                                                                                 2 GGAAGCAGCGTAAAGGATGGA 22
                                                                                                                                                                                                               2 GGCACCAGGTAAACGATGGA 22
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                                                                                                                                                                                                                                                                                                                                                                                                           ADA00216 standard; RNA; 22 BP
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22-MAR-2002; 2002EP-0006712.
26-JUL-2002; 2002EP-00016772.
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                                      Best Local Similarity 81.0
Matches 17; Conservative
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       Query Match
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ADADO216/C
ADADO216/C
ADADO216/C
ADADO216/C
ADADO216/C
ADADO2216/C
ADADO2216/C
ADADO2216/C
ADADO2216/C
ADADO2216/C
ADADO2216/C
ADADO2202
ADADO2216/C
ADADO2202
ADADO2
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Score 14.6; DB 1; Length 22; Pred. No. 8e+02;

0.8%;

Best Local Similarity

Query Match

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Malyankar UM;
hs C, Gerlach V;
                                                                                                                                                                                                                                  Human, ss; NOVX; adrenoleukodystrophy; haemophilia; stoke; VHL; PCR; congenital adrenal hyperplasia; haemophilia; hypercoagulation; didopathic thrombocytopaenic purpura; autoimmune disease; allergy; immunodeficiencies; transplantation; Von Hippel-Lindau syndrome; Alzheimer's disease; tuburous sclerosis; Parkinson's disease; epilepsy;
                                                                                                                                                                                                                                                                                                               Huntington's disease, cerebral palsy, Lesch-Nyhan syndrome; pain; multiple sclerosis, ataxia-telangiettasia; leukodystrophy, anxiety; multiple sclerosis, ataxia-telangiettasia; leukodystrophy, anxiety; renal artery stenosis; interstitial nephrittis; glomerulonephritts; polycystic kidney disease; systemic lupus erythematosus; IgA; primer; renal tubular acidosis; immunoglobulin A nephropathy; hypercalcaemia; cirrhosis; transplantation, asthma; emphysema; scleroderma; GVHD; adult respiratory distress syndrome; graft versus host disease; Ilymphedema; fertility; pancreatitis; obesity; haemophilia; ulcer; real-time quantitative PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Liu X;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Spytek KA, Li L, Edinger SR, Ellerman K, Stone DJ, Malyankar UM, Shimkets RA, Guo X, Anderson DW, Patturajan M, Berghs C, Gerlach Taupier RJ, Pena CEA, Padigaru M, Liu Y, Burgess CE, Miller CE, Gusev VY, Kekuda R, Gorman L, Zerhusen BD, Baumgartner JC; Tcherney VT, Vernet CAM, Smithson G, Heyes MP, Shenoy SG, Liu X;
                                                                                                                                                                                                        RTQ-PCR primer #1 for human protein NOV27.
1482 CCACAAACTTCCTGACACTAC 1502
                             22 CCACACACTICCTIACATICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001US-0286068P.
2001US-0286292P.
2001US-0287213P.
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03-APR-2001; 2001US-0281136F.
05-APR-2001; 2001US-0281966F.
05-APR-2001; 2001US-0282020P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-APR-2001; 2001US-0282934P.
12-APR-2001; 2001US-0283512P.
19-APR-2001; 2001US-0285325P.
23-APR-2001; 2001US-0285890P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001US-0288257P.
2001US-0291134P.
2001US-0291725P.
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2001US-0305063P.
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                                                                                                          ABX17615 standard; DNA; 22
                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200281629-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-APR-2001;
19-APR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-APR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tchernev VT,
Gangolli EA;
                                                                                                                                                                        05-FEB-2003
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                                                                                                                                         ABX17615;
                                                                          RESULT 693
                                                                                           ABX17615
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95US-00465322

05-JUN-1995;

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agent (a cellular receptor of downstream ellector) that blinds to Nova.

Nova and Nova nucleic are useful for treating or preventing Nova associated disorders in humans, and in the manufacture of a medicament for treating a Nova related disease human disease e.g.

darenoleukodystrophy, congenital adrenal hyperplasia, haemophilia, hypercoagulation, idiopathic thrombocytopaenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Von Hippelliniand (VHL) syndrome, Alzheimer's disease, cerebral palsy, epilepsy, parkinson's disease, Huntington's disease, cerebral palsy, epilepsy, lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangicctasia, leukodystrophies, behavioural disorders, addiction, anxiety, pain, neuroprotection, diabetes, renal artery stenosis, interstitial nephritis, glomerulonephritis, polycystic kidney disease, systemic lupus erypercalcaemia, cirrhosis, transplantation, asthma, emphysema, celeroderma, adult respiratory distress syndrome (ANDS), graft versus host disease (GYND), lymphedema, fertility, pancreatitis, obesity, host disease (GYND), lymphedema, fertility, pancreatitis, obesity, bacterial or parasitic infections. The present sequence is a real-time quantitative (RYO)-PCR primer used to determine the tissue specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                      NOV27 polypeptides, a mature form of NOVX, a variant of NOVX or a fragment of NOVX Also included are determining the presence or amount of NOVX in a sample (by using an antibody that immunospecifically bind to the polypeptide), determining the presence of or predisposition to disease associated with altered levels of NOVX in a first mammalian subject, identifying a potential therapeutic agent for use in the treatment of pathology related to abstrant expression of physiological interactions of NOVX, screening for a modulator of activity or of latency or predisposition to a pathology associated with NOVX, the nucleic acid encoding NOVX, vectors and host cells. NOVX is useful for identifying an agent (a cellular receptor or downstream effector) that binds to NOVX.
                                                                                                                                                                                                                                                                                                                                                                         invention relates to an isolated NOVX polypeptide selected from NOV1-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sickle cell anaemia; beta-thalassaemia; alpha-thalassaemia;
phenylketonuria; haemophilia; alphal-anti trypsin deficiency;
cystic fibrosis; cancer; plant; animal breeding; PCR; primer; P1; human;
apolipoprotein E; ApoE; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                      New polypeptides, designated NOVX polypeptides, useful for treating hemophilia, idiopathic thrombocytopenic purpura, autoimmune disease, allergies, transplantation, Alzheimer's disease and stroke.
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81.0%; Pred. No. 8e+02;
tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             primer P1 used to amplify human apolipoprotein E DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                  Example C; Page 298; 320pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600 TGGGAAACTGGAGACCTACAT 620
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Best Local Similarity
Matches 17; Conserv
WPI; 2003-046863/04
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The invention relates to a novel method for detecting a specific acid polymer, where a second nucleotide residue replaces the first nucleotide residue, where a second nucleotide residue replaces the first nucleotide residue, comprising extending the detection primer using a polymerising agent in a mixture containing one or more nucleoside triphosphates (WTPB) and detecting the incorporation of the WTP. The method of the invention may be useful for identifying specific point mutations and genetic variations, such as those associated with sickle cell anaemia, beta and alpha-thalassaemia, phenylketonuria, haemophilia, alphal-anti trypsin deficiency and cystic fibrosis. Specifically, the method on disease, for the detection of somatic mutations in cancer, for the selection of cells and strains for industrial biotechnology and for plant and animal breeding. The method comprises few and easily performed procedures, thus is especially suited for routine determinations of point mutations and nucleotide variations and allows the quantification of the proportion of mutated cells in a sample as well as the identification. The current sequence is that of the PCR primer Pl of the invention which was used to amplify human apolipoprotein E (ApoE) DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; ss, PCR; NOVX; endozepine-like protein; metabolic disorder; diabetes; obesity; infectious disease; anorexia; cancer; cardiovascular disease, hypertension; atherosclerosis; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; epilepsy; immune disorder; alzheimer's disease; Parkinson's disease; epilepsy; immune disorder; asthema; dyslipidaemia; neurogenesis; cell differentiation; cell proliferation; haematopoiesis; wound healing; angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
                                                                                                                                                                                                                                                                                     Detecting a specific nucleotide variation at a defined site in a target nucleic acid polymer, useful for pre- or postnatal diagnosis of diseases, comprises extending the detection primer using labeled nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                          invention relates to a novel method for detecting a specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human NOV1 RTQ PCR set Ag1865 primer #1.
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                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 5; 16pp; English.
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                                                         90US-00482005.
91US-00656575.
93US-00162376.
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les 17; Conservative
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                                                                                                                                                                                                          Soderlund HE, Syvanen A;
                                                                                                                                              SODERLUND H E.
                                                                                                                                                                                                                                                 WPI; 2003-708522/67.
                                                                                                                                                                (SYVA/) SYVANEN A.
                                                                                                                                                                                                                                                                                                                                                         triphosphates.
                                                         16-FEB-1990;
15-FEB-1991;
                                                                                                  02-DEC-1993;
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                                                                                                                                            (SODE/)
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Homo sapiens

US2003082530-A1

01-MAY-2003

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US2003195149-A1
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The invention relates to an isolated NOVX polypeptide comprising 3 NOV1

Drotein variants (NOVIa, NOVIc and NOVId) and NOV2 (appearing as

ADD7218, ADD72120 and ADD7223, all being endozepine—like proteins); a

CC mature form of NOVX; or a seguence that is at least 95% identical to, or

having one or more conservative amino acid substitutions in, the NOVX

CC mature form of NOVX; or a seguence that is at least 95% identical to, or

having one or more conservative amino acid substitutions in, the NOVX

CC methods for determining the presence of or predisposition to a disease

associated with altered levels of expression of NOVX or NOVX nucleic acid

molecule in a first mammalian subject, a method of identifying an agent

cc that binds to NOVX, a method for identifying a potential therapeutic

dent binds to NOVX, a method for identifying a pathology

condition of activity or of latenty or predisposition to a pathology

associated with NOVX, a method for modulating the activity of NOVX,

methods of treating or preventing a pathology associated with NOVX,

method for treating a pathological state in a mammal, an isolated nucleic

cc method for treating a pathological state in a mammal, an isolated nucleic

cc method for treating a pathological state in a mammal, an isolated nucleic

cc method for treating a pathological state in a mammal, an isolated nucleic

cc method for treating a pathological state in a mammal, an isolated

cc method for treating a pathological state in a mammal, an isolated

cc comprising the nucleic acid molecules and antibody that binds immunospecifically a colversion associated

cc method for treating a method for method for protein associated

cc method for treating a method for treating a syndrome associated

cc method for treating a method for method for treating, and antibodies are useful

cc method for treating and diseases such metabolic disorders, diabetes,

cc min man disease, polypeptides and antibodies are useful

cc protoscal), anorexia, cancer, cardiovascular disoasce, planemarch substances further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The present sequence represents an RTQ (real time quantitative) PCR primer used to assay New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, for use in therapeutic or diagnostic methods. The nucleic acids are haematopoiesis, wound healing and angiogenesis, in gene therapy, generation of antibodies that bind immunospecifically to NOVX suk tissue/cell specific expression of NOVX. Example 4; SEQ ID NO 18; 89pp; English. 29-NOV-2001; 2001US-00997594. 2000US-0253834P. 25-JAN-2001; 2001US-0264180P. 20-AUG-2001; 2001US-0313656P. Stone DJ; asthma, or infections (GANG/) GANGOLLI E A. WPI; 2003-844478/78. (STON/) STONE D J. Sangolli EA, 29-NOV-2000; 25-JAN-2001; 16-OCT-2003

Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Gaps ·: Score 14.6; DB 1; Length 22; Pred. No. 8e+02; 0; Mismatches 4; Indels 4; Indels .. Query Match 0.8%; Best Local Similarity 81.0%; Conservative 17; Matches

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22 2 GGCAAAATCATCAACATCAAC

RESULT

ADD72152 standard; DNA; 22 BP

ADD72152;

(first entry) 29-JAN-2004 Human NOV2 RTQ PCR set Ag1865 primer #1.

Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder; diabetes; obesity; infectious disease; anorexia; cancer; cardiovascular disease; hypertension; atherosclerosis; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; epilepsy; immune disorder; osteoarthritis; haematopoietic disorder; inflammatory skin disorder; asthma, dyslipidaemia; neurogenesis; cell differentiation; cell proliferation; heematopoiesis; wound healing; anglogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.

Homo sapiens.

US2003195149-A1.

16-OCT-2003.

29-NOV-2001; 2001US-00997594.

29-NOV-2000; 2000US-0253834P. 25-JAN-2001; 2001US-0264180P. 20-AUG-2001; 2001US-0313656P.

(GANG/) GANGOLLI E A. (STON/) STONE D J.

Gangolli EA, Stone DJ;

WPI; 2003-844478/78.

New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.

Example 4; SEQ ID NO 39; 89pp; English.

The invention relates to an isolated NOVX polypeptide comprising 3 NOV1

protein variants (NOV1a, NOV1c and NOV1d) and NOV2 (appearing as

ADD72118, ADD72120 and ADD72123, all being endozepine-like proteins); a

mature form of NOVX; or a sequence that is at least 5% identical to, or

having one or more conservative amino acid substitutions in, the NOVX

CC having one or more conservative amino acid substitutions in, the NOVX

CC proteins. Also included are a composition comprising NOVX and a carrier,

CC methods for determining the presence of or predisposition to a disease

associated with altered levels of expression of NOVX or NOVX nucleic acid

CC molecule in a first mammalian subject, a method of identifying an agent

CC agent for use in the treatment of a pathology which is related to

aberrant expression or interactions of NOVX, a method for screening for a

CC aberrant expression or interactions of NOVX, a method for screening for a

CC associated with NOVX, a method for modulating the activity of NOVX,

methods of treating or preventing a pathology associated with NOVX, a

CC methods for treating or preventing a pathology associated with NOVX, a

method for treating or preventing a pathology associated with NOVX, a

cc and molecule encoding NOVX (including their variants), a vector

CC comprising the nucleic acid molecule, a cell comprising the vector, an

CC antibody that binds immunospecifically to NOVX and a method for preventing

CC antibody that binds immunospecifically to NOVX and an enthod for preventing

CC antibody that binds immunospecifically to NOVX and an enthod for preventing NOVX. The polypeptides, nucleic acid molecules and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such metabolic disorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, helminthic, and

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protozoal), anorexia, cancer, cardiovascular diseases (hypertension, atherosclerosis), neurodegenerative disorders, Alzheimer's disease, pilepsy, immune disorders (osteoarthritis), haematopoietic disorders, inflammatory skin disorders, asthma, and various dyslipidaemias. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit e.g. neurogenesis, cell differentiation, cell proliferation, haematopoiesis, wound healing and angiogenesis, in gene therapy, in generation of antibodies that bind immunospecifically to NOVX substances for use in therapoutic or diagnostic methods. The nucleic acids are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder; diabetes; obesity; infectious disease; anorexia; cancer; cardiovascular disease; hypertension; atherosclerosis; pertain entrodegenerative disorder; Alizheimer's disease; Parkinson's disease; epilepsy; immune disorder; osteoarthritis; haematopoietic disorder; inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis; cell differentiation; cell proliferation; haematopoiesis; wound healing; angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
                                                                                                                                                                                                          further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The present sequence represents an RTQ (real time quantitative) PCR primer used to assay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to an isolated NOVX polypeptide comprising 3 NOV1 protein variants (NOVIa, NOV1c and NOV1d) and NOV2 (appearing as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                5; DB 1; Length 22;
8e+02;
                                                                                                                                                                                                                                                                                                                                                                                     4; Indels
                                                                                                                                                                                                                                                                                                          Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.6; Di
81.0%; Pred. No. 8e+0.
tive 0; Mismatches
                                                                                                                                                                                                                                                                    tissue/cell specific expression of NOVX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human NOV2 RTQ PCR set Ag2029 primer #1.
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                                                                                                                                                                                                                                                                                                                                                                                                                             886 GGGAACATCATCAACATGCAC 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 GGCAAAATCATCAACATCAAC 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADD72164 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-NOV-2001; 2001US-00997594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-NOV-2000; 2000US-0253834P.
25-JAN-2001; 2001US-0264180P.
20-AUG-2001; 2001US-0313656P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stone DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GANG/) GANGOLLI E A.
                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NPI; 2003-844478/78.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003195149-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sangolli EA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-OCT-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADD72164;
                                                                                                                                                                                                                                                                                                                                                                                         Matches
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comparison expression or interactions or predisposition to a pathology associated with NoVX, a method for modulating the activity of NoVX, a method for preventing a pathology associated with NoVX, a method for preventing a pathology associated with NoVX, a method for treating a pathology state in a mammal, an isolated nucleic acid molecule acid molecule encoding NoVX (including their variants), a vector and the nucleic acid molecule, a cell comprising the vector, and antibody that binds immunospecifically to NoVX and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NoVX-associated disorder. The nucleic acid molecules polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such metabolic disorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (hypertension, atherosclerosis), neurodegeneative disorders, Alzheimer's disease, barkinson's disease, epilepsy, immune disorders, asthma, and various dysligidaemias. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibite e; an neurogenesis, cell differentiation, cell proliferation, chaematopoiesis, wound healing and angiogenesis, in gene therapy, in certain and angiogenesis, in gene therapy, in comparation of antibodies that bind immunospecifically to NoVX substances further used as thybrid and proposed in thromogenesis, and polypeptides are the proposed as that bind immunospecifically to its resurges in the respect or inhibite and and proposed and publication and proposed as the proposed and that bind immunospecifically to its resurges in the respect or inhibite and and proposed in the resurber in the result of the result 
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                                                 mature form of NOVX; or a sequence that is at least 95% identical to, or having one or more conservative amino acid substitutions in, the NOVX proteins. Also included are a composition comprising NOVX and a carrier, methods for determining the presence of or predisposition to a disease associated with altered levels of expression of NOVX or NOVX nucleic acid molecule in a first mammalian subject, a method of identifying an agent that binds to NOVX, a method for identifying a potential therapeutic agent for use in the treatment of a pathology which is related to abstrant expression or interactions of NOVX, a method for screening for a
ADD72118, ADD72120 and ADD72123, all being endozepine-like proteins); a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder; diabetes; obesity; infectious disease; anorexia; cancer; cardiovascular disease; hypertension; atherosclerosis; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; epilepsy; immune disorder; osteoarthritis; haematopoietic disorder; chinflammatory skin disorder; asthma; dysilpidaemia; neurogenesis; cell differentiation; cell proliferation; haematopoiesis; wound healing; angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The present sequence represents an RTQ (real time quantitative) PCR primer used to assay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tissue/cell specific expression of NOVX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human NOV1 RTQ PCR set Ag2029 primer #1.
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nes 17; Conservative
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US2003195149-A1

16-OCT-2003.

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Stone DJ;
                               asthma, or infections.
            (GANG/) GANGOLLI E A. (STON/) STONE D J.
                     WPI; 2003-844478/78.
                  Gangolli EA,
     29-NOV-2000;
                                                                                                        typing,
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Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

detecting in a patient a predisposition to a genetic disorder resulting from a specific nucleotide variation at a defined site in a genetic material of the patient by employing the steps of the method above, a kit for determining the specific nucleotide variations in a target nucleic acid polymer, a reagent for detecting the presence of a point mutation in which a normal nucleic acid residue is replaced by an abnormal nucleic

acid residue at a defined site within gene of interest, detecting at a defined site in the genome of a microorganism the existence of point

mutations leading to altered pathogenicity or resistance to therapy in microorganisms and detecting cells having a point mutation at a defined site in the genetic material. The method is useful for identifying specific point mutations and genetic variations. Specifically, the method can be used for pre- or postnatal diagnosis of hereditary predispositions or diseases, for the detection of somatic mutations in cancer, for the selection of cells and strains for industrial biotechnology and for plant

and animal breeding. The new method provides several advantages over prior methods. The new method comprises few and easily performed

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                                 Gaps
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0
0.8%; Score 14.6; DB 1; Length 22; 81.0%; Pred. No. 8e+02; cive 0; Mismatches 4; Indels
                                17; Conservative
   Query Match
Best Local Similarity
                   Best Loca
Matches
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RESULT 699

The invention relates to an isolated NoVX polypeptide comprising 3 NOV1 protein variants (NOV12, NOV12 and NOV13 and NOV2 (appearing as ADD72118, ADD72123, all being endozepine-like proteins); a mature form of NOVX, or a sequence that is at least 95% identical to, or with a composition comprising NOVX and carrier, proteins. Also included are a composition comprising NOVX and carrier, methods for determining the presence of or predisposition to a disease composition of NOVX or NOVX nucleic activation of NOVX or NOVX nucleic activation of the treatment of a pathology which is related to aberrant expression or interactions of NOVX, a method for identifying an agent of aberrant expression or interactions of NOVX, a method for screening for agent for use in the treatment of a pathology which is related to aberrant expression or interactions of NOVX, a method for modulating the activity of NOVX, and associated with NOVX, a method for modulating the activity of NOVX, and associated with NOVX, a method for modulating the activity of NOVX.

The polypeptides of treating or preventing a pathology associated with NOVX, a method for modulating the administry of NOVX. The polypeptides, nucleic acid molecules and antibodies are useful or antibody that binds immunospecifically to NOVX and a method for producing the nucleic acid molecules and antibodies are useful or in the manufacture of a medicament for treating a syndrome associated with a human disease, preferrably a NOVX-associated disorder. The nucleic acid molecules, inflammatory skin disorders, disbetes, obseity, infectious diseases (viral, bacterial, fungal, helminthic, and acid molecules for the identification of send polypeptides may also be attricted of antibodies are useful ferentiation, and accorder of sharmanic or said and polypeptides may a sociated and polypeptides may a stagets for the identification of small molecules that modulate or inhibit engo nervation of antibodies; wound healing and anglogenesis, in gene therapers or inhibite or inhering or a stargets used as hybridisation probes, in chromosome mapping, tissue preventive medicine, and pharmacogenomics. The present sequence New isolated NOVX polypeptides and polynuclectides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, for use in therapeutic or diagnostic methods. The nucleic acids are further used as hybridisation probes, in chromosome mapping, tissue represents an RTQ (real time quantitative) PCR primer used to assay tissue/cell specific expression of NOVX. Example 4; SEQ ID NO 33; 89pp; English. 29-NOV-2001; 2001US-00997594. 25-JAN-2001; 2001US-0264180P. 20-AUG-2001; 2001US-0313656P. 2000US-0253834P.

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The invention relates to detecting a specific nucleotide variation at a defined site in a target nucleic acid polymer, where a second nucleotide residue. Comprises hybridising a detectable amount of a target nucleotide residue. Comprises hybridising a detectable amount of a target nucleotide residue. Supplementary to the nucleotide several nucleotide residues and is complementary to the nucleotide sequence of interest in a region disposed toward the 3' end from the sequence of interest in a region disposed toward the 3' end from the care no nucleotide residues between the defined site and the 3' end of the primer that are identical to the first or second nucleotide residues to be detected), extending the primer using a polymerising agent in a mixture containing one or more NTPs (and at least one NTP complementary to either the first or second nucleotide residue that comprises a means for detecting the incorporation of the NTP; and catic polymer and optionally one or more chain terminating NTPs) and detecting the incorporation of the NTP, where the identity of the nucleotide residue at the defined site is determined, also included are nucleotide residue at the defined site is determined.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Detecting a specific nucleotide variation at a defined site in a target nucleic acid polymer, useful for pre- or postnatal diagnosis of diseases, comprises extending the detection primer using labeled nucleotide
                                                                                                                                                  Human; 88; PCR; primer; apolipoprotein E; ApoE; nucleotide variation; genetic disorder; point mutation; prenatal diagnosis; postnatal diagnosis; somatic mutation; cancer.
                                                                                                                  Human apolipoprotein E PCR primer Pl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 5; 16pp; English.
                 ADM31242 standard; DNA; 22 BP.
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                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Soderlund HE, Syvanen A;
                                                                                                                                                                                                                                                                                                                                                                                                                         (SODE/) SODERLUND H E. (SYVA/) SYVANEN A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   triphosphates.
                                                                                                                                                                                                                       Homo sapiens.
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                                                                                   20-MAY-2004
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                                                   ADM31242;
ADM31242
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procedures, thus especially suited for routine determinations of point mutations and mucleotide variations, allows the quantification of the proportion of mutated cells in a sample as well as the identification of mutations present in as little as 0.5% of the analysed cell population, and is easily automated. The present sequence is a PCR primer used in the method of the invention to detect polymorphisms in the apolipoprotein gene corresponding to amino acids 112 and 158.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cardiovascular; antiarteriosclerotic; hypotensive; cytostatic; anorectic; antidiabetic; immunosuppressive; anti-HIV; neuroprotective; nootropic; antiparkinsonian; antiasthmatic; antiinfertility; cardiomyopathy; atherosclerosis; hypertension; cancer; obseity; diabetes; AIDS; multiple sclerosis; graft-versue-host disease; Alzheimer's disease; Parkinson's disease; asthma; fertility disorder; chromosome mapping; tissue typing; preventive medicine; pharmacogenomic; vaccine; primer; ss.
                                                                                                                                                                                                                                                                                                                                                   Gaps
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0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                            1301 AGGAGTTCAAGACATACAACT 1321
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2002US-03867UIP
2002US-03867UIP
2002US-0387078P
2002US-0387081P
2002US-0387081P
2002US-038766P
2002US-038766P
2002US-038760P
2002US-038760P
2002US-038760P
2002US-038760P
2002US-038760P
2002US-038760P
2002US-038760P
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2002US-0386357P.
2002US-0386447P.
2002US-0386459P.
2002US-0386459P.
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2002US-0385755P.
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07-JUN-2002;
07-JUN-2002;
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07-JUN-2002;
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Alsobrook JP, Anderson DW, Baumgartner JC, Berghs C, Boldog FL; Burgess CE, Casman SJ, Catterton E, Dhanabal M, Edinger SR; Bilerman K, Ettenberg S, Gangolli EA, Gerlach VL, Gorman L, Grosse WM, Gunther E, Guo X, Gusev VY, Herrmann JL, Ji W, Kekuda R, Khramtsov NV, Larochelle WJ, Li L, Liang H, Low K, Macdougall JR; Maclachlan T, Malyankar UM, Mcqueeney K, Mezick AJ, Miller CE; Millet I, Padigaru M, Patturajan M, Peyman JA, Qian X, Rastelli L; Rieger DK, Rothenberg ME, Shenoy SG, Shimkets RA, Stone DJ, Sukumaran S, Szekeres ES, Vernet CAM, Voss EZ;
       12-JUN-2002; 2002US-0388432P.

12-JUN-2002; 2002US-0388473P.

13-JUN-2002; 2002US-0389123P.

14-JUN-2002; 2002US-0389120P.

17-JUN-2002; 2002US-0389146P.

17-JUN-2002; 2002US-0389604P.

18-JUN-2002; 2002US-0389604P.

18-JUN-2002; 2002US-0389604P.

19-JUN-2002; 2002US-0389604P.

19-JUN-2002; 2002US-0390146P.

19-JUN-2002; 2002US-0390126P.

25-JUN-2002; 2002US-0390126P.

66-AUG-2002; 2002US-0401628P.

69-AUG-2002; 2002US-0401628P.
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2002US-0403458P.
2002US-0403617P.
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12-SEP-2002; 2002US-0410085P.
13-SEP-2002; 2002US-0410505P.
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2002US-0415195P.
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23-OCT-2002; 2002US-0420718P.
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31-OCT-2002; 2002US-0422750P
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Zhong M,
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13-AUG-2002;
15-AUG-2002;
15-AUG-2002;
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30-SEP-2002;
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WPI; 2004-053467/05.

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New NOVX polypeptides and nucleic acid molecules useful for preventing or treating NOVX-associated disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, in chromosome mapping, tissue typing or in pharmacogenomics.

Disclosure; SEQ ID NO 1440; 1503pp; English.

The invention relates to 566 new isolated human polypeptides and their encoding genes, sequences that are at least 95% identical to these or sequences comprising one or more conservative substitutions in these. The polypeptide, polymucleotide and antibodies against the polypeptides are useful in diagnosing, treating or preventing NOVX-associated disorders, e.g. cardiomyopathy, atherosclerosis, hypertension, cancer, obesity, diabetes, ALDS, multiple sclerosis, graft-versus-host disease, Darkinson's disease, asthma, or fertility disorders. The nucleic acids are further used as hybridization probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The polypeptides are also useful as vaccines. This sequence represents an example of the forward primer used to amplify a probe to isolate the nucleic acid sequences of the invention.

Sequence 22 BP; 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Gaps ö 0.8%; Score 14.6; DB 1; Length 22; 81.0%; Pred. No. 8e+02; Live 0; Mismatches 4; Indels Query Match
Best Local Similarity 81.0'

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                                                                                                                                                                                                                                                                                                                                                                                                            Detrusor estrogen-regulated protein; DERP; DERP-related disorder; impaired detrusor contractility; urinary retention; Alzheimer's disease; cardiovascular disease; osteoporosis; smooth muscle function; nootropic; neuroprotective; osteopathic; immunostimulant; therapy; rat; RT-PCR;
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81.0%; Pred. No. 8e+02;
ative 0; Mismatches 4; Indels
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                                                                                                                                                                                                                                                                                                                                                            Rat DERP DNA amplifying RT-PCR primer #18.
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600 TGGGAAACTGGAGACCTACAT 620
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                               reverse transcription; primer; ss
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                                                                                                                                                                                      ADI19085 standard; DNA; 22
                                                                                                                                                                                                                                                                                                     (first entry)
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Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rattus norvegicus
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5694/c ADK96694 standard; DNA; 22 BP.

ADK96694

ADK96694/c ID ADK96 XX AC ADK96

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The present invention relates to a polynucleotide isolated from a human gene and is useful for detecting a single nucleotide polymorphism in a human gene or for diagnosing of disease. The invention enables the detection of a single nucleotide polymorphism in a human gene. The present sequence represents a primer of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G-protein coupled receptor for asthma susceptibility, AAA1, asthma associated alternatively spliced gene 1, primer, PCR; chronic obstructive pulmonary disease; cancer; rhinitis; dermatitis; cytostatic, antiasthmatic, transgenic, asthma locus-1.
                                                                                                                                                                                                                                                                                                                                                                                                                 Novel polynucleotide useful for PCR amplification along with two fragment from another set of sequences, or for detecting single
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81.0%; Pred. No. 8e+02;
tive 0; Mismatches 4; Indels
                                                                              human; single nucleotide polymorphism; SNP; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ss; AST-1; asthma; IgE mediated disease; human; GPRA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 22 BP; 8 A; 2 C; 10 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 2; SEQ ID NO 5723; 2627pp; Japanese.
                                                                                                                                                                                                                                                                                                                                   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleotide polymorphism in human gene
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                                    Primer of the invention #2414.
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03-JAN-2003; 2003US-0437895P.
26-MAR-2003; 2003US-0458767P.
09-JUL-2003; 2003US-04686000P.
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(first entry)
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Best Local Similarity
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06-MAY-2004
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                                                                                                                         Synthetic.
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PAX5 alpha or beta gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     activities. Furthermore, it provides a transgenic animal comprising the asthma locus-1 (AST-1) DNA. This oligonucleotide sequence is a PCR primer
                                                                                                                                                                                                                                                     This invention relates to the identification of a novel susceptibility locus AST-1 for asthma and other IgE mediated diseases mapped to the human chromosome 7p14-p15. Specifically, it refers to two overlapping genes namely GPRA (G-protein coupled receptor for asthma susceptibility) and AAA1 (asthma associated alternatively spliced gene 1). The present invention describes identifying single nucleotide polymorphisms, as well as insertion or deletion polymorphisms, occurring at different positions in the AST-1 locus, and furthermore providing vectors, host cells, primers and probes in order to determine the status of an individual. Accordingly, it provides a kit to diagnose or assess predisposition to asthma, chronic obstructive ullmonary disease or cancer and other IgE mediated diseases including rhinitis and dermatitis, such that derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Detecting aberrant promoter methylation associated with a predisposition to cancers of the breast, lung and colon in a human, useful for diagnosing or monitoring cancer, comprises detecting methylation of the
                                                                                                                                        New GPRA polypeptides, useful in preparing a composition for diagnosing, treating or preventing asthma, other IgE-mediated disease, chronic obstructive pulmonary disease or cancer.
                                         Polvi A, Maekelae S, Vendelin J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stage 2 MSP primer beta-BSM3 used to analyse human PAX5 sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pharmaceutical compositions exhibit cytostatic and antiasthmatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               used to clone human GPRA DNA, given in table 4 of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 0.8%; Score 14.6; DB 1; Length 22; 1 Similarity 81.0%; Pred. No. 8e+02; 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 22 BP; 5 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1568 CTGACTCAGGCAGGCCAGCTT 1588
                                         Laitinen LA,
                                                                                                                                                                                                                      Example 7; Page 75; 265pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-2001; 2001US-0348407P.
                                                           Salmikangas P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Belinsky SA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADD00034 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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                                                                                              WPI; 2004-500286/47.
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Best Local Similarity
  (GENE-) GENEOS OY
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                                     Laitinen T, |
Pulkkinen V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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                                               The invention relates to a novel method for detecting aberrant promoter methylation associated with predisposition to cancers of the breast, lung and colon in a human comprising detecting methylation of the PAK5 alpha or beta gene. The method of the invention may be useful in screening for, monitoring or diagnosing human cancer, particularly breast, lung or colon cancer. The current sequence is that of the stage 2 MSP (methylation specific PCR) primer beta-BSM3 of the invention used to analyse the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antibodies specific for membrane bound IgA - and hybridomas producing them, used to increase IgA prodn., partic. in patients with infectious disease or allergy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Primer; IgA membrane anchor; IgA epitope; monoclonal antibody; therapeutic; ds.
                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.4; DB 1; Length 16; 93.8%; Pred. No. 6.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                Sequence 16 BP; 0 A; 9 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA primer for human IgA membrane anchor.
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Disclosure; Page 6; 31pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     560 GCGCCGCCTCCGTCG 575
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89US-00455080.
91US-00760765.
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Matches 15; Conservative
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                                                                                                                                                                                                                                                                             PAX5 sequence.
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22-DEC-1989;
16-SEP-1991;
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24-JUN-1995
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AAV94784;
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Best Local
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligo:nucleotide(s) corresponding to human IgA segments - comprising membrane anchoring extracellular peptide segments, used to develop prods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Exon; membrane anchoring extracellular peptide; human; immunoglobulin; IgA; constant heavy region; cell surface; lung fibroblast cell line; primer; PRR; amplification; probe; isoform; splicing site; antibody; post-transcriptional processing; prophylaxis; infectious disease; allergy; immunodeficiency disease; ds.
                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Human 1gA membrane anchoring extracellular peptide segment primer #1
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                                                  1; Indels
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0.8%; Score 14.4; DB 1
93.8%; Pred. No. 7e+02;
ive 0; Mismatches
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                                                                                                  1273 GAGACGTGGCCAGGCA 1288
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89US-00455080.
91US-00760765.
93US-00095068.
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                                                                                                                                                                                                                                                                     AAT10550 standard; DNA; 17
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                                                    15; Conservative
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Query Match
Best Local Similarity
Matches 15; Conserv
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les 15; Conserv
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22-DEC-1989;
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20-JUL-1993;
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18-JUL-1996
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The present sequence invention describes ribozymes targeted to modulate the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA. AAV93889 to AAV94574 represent specifically claimed ribozymes, and AAV94575 to AAV95260 represent specifically claimed substrate sequences from the present invention. The ribozymes can be used for the treatment of, e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy and other inflammatory conditions. The ribozymes are also used to induce tolerance in a recipient to alloantigen from a donor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer, autoimmune disease and allergies.
                                                                                                                                                                                                    Human, IL-2 receptor g-chain; interleukin 2 receptor gamma chain;
hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer;
autoimmune disease; psoriasis; allergy; inflammatory disease;
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                                                                                                                                                      Human IL-2 receptor g-chain substrate position 1330.
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  BP.
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uncucccucAgucugg 16
AAV94784 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM INC.
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(first entry)
                                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                    graft rejection, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1998-333332/29.
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                                                                                                                                                                                                                                                                                                                                       sapiens
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                                                                                                      24-FEB-1999
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1273 GAGACGIGGCCAGGCA 1288

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17 GAGACTTGGCCAGGCA 2

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cerebroprotective, notropic, neuroprotective, antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; NDAzyme; inozyme; growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; d-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin; slymphoma; NHL; lymphocytic leukaemia; MCL; immunocytoma; HC; immune thromborytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; Parkinson's disease; ataxia; Huntingcon's disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                        Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
                                                                                                                                                                                                                                                                                                                                                                     11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                            09-FEB-2001; 2001WO-US004273
                                                                                                                                                                                                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC.
12-MAR-2002 (first entry)
                            Human CD20 G-cleaver #56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CHOW/) CHOWRIRA B M.
                                                                                                                                                                                                                                                                                    WO200159103-A2.
                                                                                                                                                                                                                                                                                                                16-AUG-2001
                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                            (BLAT/)
(MCSW/)
 purified DNA of positive clones identified by the probe AAT86542. An oligonuclectide probe (AAT86542) which corresponds to a segment located in the CH3 coding region of immunoglobulin allotype alphal and alpha2 and was synthesised and used as a probe to screen phage clones containing oil or alpha2 gene segments. The library was constructed using genomic DNA from human lung fibroblast line, W138, packaged in phage FIX. Primer AAT86543 is located in the intron about lkb downstream from CH3 exon and primer AAT86544 is a very conservative segment in the mouse alpha membrane exon. The invention relates to a unique extracellular peptide segments form, entirely or in part, antigenic epitopes unique to membrane bound but not secreted IgA, and thereby provide a unique to membrane bound but not secreted IgA, and thereby provide a unique epitope on the IgA-bearing B cells to which membrane bound IgA is attached. These peptide segments can be used as immunogens to generate antibodies which specifically, target membrane-bound IgA and IgA-bearing B cells. (Updated
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide fragments of human membrane-bound immunoglobulin A - for generating anti-IgA antibodies, useful for treatment of B-cell leukaemia(s) or lymphoma(s) or IgA-mediated nephropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 7e+02; Ive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                             90US-00515604.
91US-00760765.
92US-00973321.
                                                                                                                               88US-00226421.
88US-00229178.
88US-00272243.
                                                                                                                                                                     89US-00369479,
89US-00369625,
89US-00455080,
90US-00468766,
                                                                                                                                                                                                                                                                     93US-00090527.
93US-00095068.
93US-00137253.
                                                                                                                                                                                                                                                                                                                                                                          (TANO-) TANOX BIOSYSTEMS INC.
                                                                                                                                                                                                                                                                                                                                              94US-00249558
                                                                                     96US-00619790
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                                                                                                                                                                                                                                                                                                                                                                                                      Chang NT;
                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1998-017568/02.
  Homo sapiens.
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                                                                                     20-MAR-1996;
                                                                                                                                                                                                                   23-JAN-1990;
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                             US5690934-A
                                                                                                                                              05-AUG-1988
                                                                                                                                                           16-NOV-1988
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                                                         25-NOV-1997
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Chowrira BM;

Mcswiggen J,

MCSWIGGEN J.

sapiens.

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The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down cegulates expression of a neurite growth inhibitor gene (NGOD). The regulates expression of a neurite growth inhibitor gene (NGOD). The concleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving a an RNA molecule CD possessing an NCH mocif, a G-cleaver (cleaving RNA with a NCW nucleif) provided in the presence of a divalent cation that is preferably MG<sup>2</sup> +.

Concloin the presence of a divalent cation that is preferably MG<sup>2</sup> +.

Cruthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more conforced. The conforced with a cell to reduce CD20 activity of the cell and treatment may further comprise the use of one or more conforced. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma (MLL), bulky low-grade or follicular NHL, lymphocytic lymphoma (MCL), immunocytopana (IMC) small B-cell lymphocytic lymphoma, conforced acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably MG<sup>2</sup>+. Furthermore, the presence of a divalent cation that is preferably MG<sup>2</sup>+. Furthermore, the concleic acid may be contacted with a cell to reduce NOGO activity of the concleic acid may be concacted with a cell to reduce NOGO activity of the concleic. In and treat a patient having a condition associated with the level of therapies. In particular, the NOGO-targetting nucleic acid may be contacted with a cell to reduce Concerted with a cell to reduce CO therapies. In particular, the NOGO-targetting nucleic acid may be concacted with a cell to reduce NOGO activity of the contacted with a cell to reduce NOGO activity of the concacted with a cell to reduce not more cell and treat a patient having a condition associated with a cell sea to concition acid and any be use
                                                                                                                             Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.
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WPI; 2001-607195/69.
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Gaps

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1273 GAGACGIGGCCAGGCA 1288

GAGACTTGGCCAGGCA

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93.8%;

Local Similarity 93.8 les 15; Conservative

Best Loca Matches

ABK03441 standard; RNA; 17 BP

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RESULT 709 ABK03441/c ABK03441;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE; mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense; UDP-diucuronosyltransferase; amyloid precursor protein; presenilin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and for chemical
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                                                                                                                                                                                                                                                         DB 1; Length 17;
                                                                                                                                                                                                                                                     Score 14.4; DB 1; Length 1
Pred. No. 7e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HBA2 mutation correcting oligonucleotide SEQ ID NO: 2930.
                                                                                                                sequence is a G-cleaver molecule of the invention
                                                                                                                                                                                 Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;
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                                                                                                                                                                                                                                                         0.8%;
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27-MAR-2000; 2000US-0192179P.
01-JUN-2000; 2000US-026358P.
30-OCT-2000; 2000US-0244989P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-MAR-2001; 2001WO-US009761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABA80084 standard; DNA; 17
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Best Local Similarity 93.8 Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; gene therapy, adenosine deaminase deficiency; p53; beta-globin, retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE; mismacch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR; familial hypercholesterolaemia; QGTI; syndrome; APP; PSENI; antisense; UDP-glucuronosyltransferase; amyloid precursor protein; presentilin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligonucleotide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.
              haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting
                                                                                                                                                                                                   Gaps
cancer, adenosine deaminase deficiency, cystic fibrosis,
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                                                                                                                                                         0.8%; Score 14.4; DB 1; Length 17;
93.8%; Pred. No. 7e+02;
lve 0; Mismatches 1; Indels
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                                                                                                                    Seguence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
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                                                                          oligonucleotides of the invention
                                                                                                                                                                                                                                         1631 CCAGCAGCCAGCGCT 1646
                                                                                                                                                                                                                                                                                                                                                                                  ABA80085 standard; DNA; 17 BP
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27-MAR-2000; 2000US-0192179P.
01-JUN-2000; 2000US-0208538P.
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                                                                                                                                                                              93.8%;
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                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                        30-JUL-1999;
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                                                                            04-MAY-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to canine beta-galactosidase. The cDNA molecule and kit are useful for screening the R60H mutation of acid betagalactosidase. The cDNA molecule is also useful for screening Portuguese Water dogs to eliminate carriers of GM-gangliosidosis from breeding
presentiin-2 (PSEN2). These can be used in the gene therapy of diseases such as cancer, adenosine deaminase deficiency, cystic fibrosis, haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting oligonucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New beta-galactosidase gene isolated from Canis familiaris, useful for screening R60H mutation of acid beta-galactosidase, or for screening Portuguese Water dogs to eliminate carriers of GM1-gangliosidosis from
                                                                                                                         Gaps
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                                                                                                 0.8%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 7e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                          Primer #3 used to isolate dog beta-galactosidase cDNA
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                                                                                                                                              1631 CCAGCAGGCAGCGCT 1646
                                                                                                                                                                                                                        AAC83038 standard; DNA; 17 BP
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                                                                                                                                                                CCAGCAGCAGTGGCT 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            KOLODNY E H.
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RAGHAVAN S.
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The present invention provides nucleotides encoding molecular variants of the human multi drug resistance-1 (MDR-1) protein. These can be used to identify compounds capable of treating multidrug resistance and sensitivity interfering resulting from polymorphisms in MDR-1, which can lead to difficulties in treating cancer, cardiovascular, neuronal, inflammatory and CNS diseases
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polynucleotide encoding a molecular variant Multi Drug Resistance (MDR)-1 polypeptide is useful for diagnosing and treating diseases associated with abnormal MDR-1 expression or function, e.g. cancer.
                                                                                                                                                                                                          Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer; inflammatory disease; neuronal disease; CNS disease; cardiovascular disease; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                          Human multi drug resistance-1 gene related sequence SEQ ID NO: 114.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 5 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eichelbaum M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
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BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-JUL-2000; 2000WO-EP007314.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99EP-00114938
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AAF91027 standard; DNA; 17
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17 CAGGATGACCAGCAGT 2

Homo sapiens

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Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                      Example 2; Page 72; 718pp; English
                                                                     30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
23-MAY-2001; 2001US-00864761.
03-OCT-2001; 2001US-0327898P.
                                                      2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                      52
                              2002EP-00001167
                                                                                                                                                                                                                                                                                                                                                                                                                                      40 GCAGGAGGACCAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.8
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                      WPI; 2002-676582/73.
                                                                                                                      (AEOM-) AEOMICA INC
                              28-JAN-2002;
                                                      30-JAN-2001;
EP1229046-A2
                                              30-JAN-2001;
               07-AUG-2002
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The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome lopi2.1. HTPL and ist coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and foctal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention 0; Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Parched like protain; testis; adrenal; liver; male germ cell development; bome marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss. Gaps ö 0.8%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 7e+02; tive 0; Mismatches 1; Indels Sequence 17 BP; 0 A; 7 C; 4 G; 6 T; 0 U; 0 Other; Human HTPL scanning oligonucleotide SEQ ID 63. ABV78817 standard; DNA; 17 BP. GCAGGAGGAACAGCAG 1 03-JAN-2003 (first entry) 16 ABV78817 RESULT 715

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The present interior of the state of the state of the present accounts in present interior of the present interior of the state of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to human testis expressed Patched like
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 0 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 72; 718pp; English.
                                                                                                                                                                                                                                30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
33-JAN-2001; 2001WO-US000669.
33-MAY-2001; 2001US-008047161.
09-OCT-2001; 2001US-0327898P.
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                                                                                                                                                        28-JAN-2002; 2002EP-00001167
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                                                 EP1229046-A2
                                                                                                                                                                                                          30-JAN-2001;
                                                                                                   07-AUG-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zhan J;
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09-APR-2002 (first entry)

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The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Bwing's sarcoma, melanoma, conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, cumour angiogenesis, diabetic retinopathy, macular degeneration, cumour angiogenesis, diabetic retinopathy, macular degeneration, verruca vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, Rippel-Trenaunay-Weber syndrome, Osler-Weber-rendu cyndrome, leukaemia, osteoprosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. Leukaemia or tumour conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a coll, by contacting (I) is useful for reducing ERG activity in a cell, by contacting (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to the presence of ERG RNA in a cell. (I) is useful for specifically the presence of ERG RNA in a cell. (I) is useful for specifically carryeting genes that share homology with ERG gene or ERG fusion genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel polynucleotide which down regulates expression of Ets-related gene, useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
               neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleic acid molecules which regulate expression of ERG, and
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tumour angiogenesis, diabetic retinopathy, macular degeneration,
neovascular glaucoma, myopic degeneration, arthritis, verruca vu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mcswiggen JA, Mclaughlin F,
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                                                                                                                                                                                                                                                                                                                 16-MAY-2001; 2001WO-US015866.
                                                                                                                                                                                                                                                                                                                                                              16-MAY-2000; 2000US-00572021
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                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC. (GLAX ) GLAXO GROUP LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-082995/11
                                                                                                                                                                                                                   WO200188124-A2.
                                                                                                                                                                      Homo sapiens.
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                                                                                                                      amberzyme.
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                             Gaps
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0.8%; Score 14.4; DB 1; Length 17;
11.2%; Pred. No. 7e+02;
ve 2; Mismatches 1; Indels
                            2;
                                                      1297 AACGAGGAGTTCAAGA 1312
             81.2%;
                                                                                  1 AACGGGGAGUUCAAGA
                             Conservative
             Local Similarity
Les 13; Conserv
 Query Match
                Best Loca
Matches
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ABK17468 standard; RNA; 17 ABK17468; RESULT 717 **ABK17468** g SXXX

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Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Leukaemia; ss; osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNRzyme; inozyme;
                                                                                                                                                                                                                                                                      Randi AM;
                  Human ERG hammerhead ribozyme target sequence, Seq ID No 115.
                                                                                                                                                                                                                                                                      Mclaughlin F,
                                                                                                                                                                                                                                                                      Mcswiggen JA,
                                                                                                                                                                                                 16-MAY-2001; 2001WO-US015866.
                                                                                                                                                                                                                     16-MAY-2000; 2000US-00572021
                                                                                                                                                                                                                                                                      Von Carlowitz I,
                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC. (GLAX ) GLAXO GROUP LTD.
                                                                                                                                                           WO200188124-A2.
                                                                                                                                        Homo sapiens.
                                                                                                                                                                             22-NOV-2001.
                                                                                                                                                                                                                                                                      Jarvis T,
                                                                                                                    amberzyme.
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gene, Novel polynucleotide which down regulates expression of Ets-related genuseful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

WPI; 2002-082995/11.

Claim 4; Page 61; 149pp; English.

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, tumour angiogenesis, diabetic retinopathy, macular degeneration, convascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, port-whose stains, Sturge Weber syndrome, Rippel-Trenaunay-Weber syndrome, Osler-Weber-rendu Syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically targeting genes that share homology within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically engagenesic mucleic acids, including antisense and enzymeatro nucleic acids, including antisense and related PCR primers of the invention

Gaps .. 0 0.8%; Score 14.4; DB 1; Length 17; 31.2%; Pred. No. 7e+02; Indels Seguence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other; 1; Mismatches 2; 81.2%; 13; Conservative Similarity Query Match Local Matches ð

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Gaps

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Indels

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81.2%; Pred. No. 7e+02; ive 2; Mismatches

Best Local Similarity 81.2 Matches 13; Conservative

719

704 AGGAGATCAGACTGGA

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1 AGGAGAUCAGCCUGGA 16

Human; hammerhead ribozyme, cytostatic, antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;

Human ERG Amberzyme target sequence Seq ID No 1903.

(first entry)

09-APR-2002

ABK19256;

ABK19256 standard; RNA; 17 BP.

RESULT 719 **ABK19256**

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Claim 4; Page 72; 149pp; English.
       ABK18069 standard; RNA; 17 BP.
                                                                                                16-MAY-2001; 2001WO-US015866.
                                                                                                       16-MAY-2000; 2000US-00572021
                                                                                                              (RIBO-) RIBOZYME PHARM INC. (GLAX ) GLAXO GROUP LTD.
                     09-APR-2002 (first entry)
                                                                                                                                 WPI; 2002-082995/11.
                                                                                 WO200188124-A2.
                                                                          Homo sapiens.
                                                                                        22-NOV-2001.
                                                                  amberzyme.
              ABK18069;
RESULT 718
   ABK18069
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The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sacroma, melanoma, conditions selected from cancer, lymphoma, Ewing's sacroma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, cumour angiogenesis, diabetic retinopathy, macular degeneration, or unigaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more theraples the treatment in method comprises the use of one or more theraples conditions suitable for the treatment. Leukaemia or tumour conjunction with one or more of other theraples such as radiation or conjunction with one or more of other theraples such as radiation or conjunction with one or more of other theraples such as radiation or conjunction with one or more of other theraples such as radiation or conjunction with one or more of other theraples such as radiation or conjunction with one or more of other theraples such as radiation or conjunction with one or more of other theraples such as radiation or conjunction with one or more of other theraples such as radiation or call, by contacting (I) is useful for diagnostic of conditions and ciseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within regulate expression of ERG and carged parts and mutations within regulate expression of ERG, and carged proverser nucleic acid molecules within regulate expression of ERG, and carged proverser nucleic acid molecules within regulate expression of ERG, and carged proverser nucleic acid molecules within regulate expression of ERG, and created proversers of the invention
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                                                                                                                             Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;
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Human ERG hammerhead ribozyme target sequence, Seq ID No 716.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
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neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tubercous sclerosis, port-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu volugaris, angiofibroma of tubercous sclerosis, port-wine stains, Sturge Weber syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. Leukaemia or tumour the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically the presence of ERG RNA in a cell. (I) is useful for specifically the presence of ERG RNA in a cell. (I) is useful for specifically capering genes that share homology with ERG gene or ERG fusion genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration,
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0.8%; Score 14.4; DB 1; Length 17;

Query Match

Novel polynuclectide which down regulates expression of Ets-related gen useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 124; 149pp; English.

Randi AM;

Von Carlowitz I, Mcswiggen JA, Mclaughlin F,

16-MAY-2001; 2001WO-US015866.

WO200188124-A2. Homo sapiens.

amberzyme.

22-NOV-2001.

16-MAY-2000; 2000US-00572021 (RIBO-) RIBOZYME PHARM INC.

(GLAX) GLAXO GROUP LTD

WPI; 2002-082995/11.

Jarvis T,

(first entry)

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PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy.
                                                                                                                                                                                                                                     Human PAPP-Ea associated 17-mer SEQ ID 545.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 2; Page 146; 353pp; English.
                                                                                                          ABS75019 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAY-2000; 2000US-0207456P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-APR-2001; 2001US-00827998.
2 AACTTCGTTCTGCAAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-697817/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gu Y, Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GUYY/) GU Y.
(SHAN/) SHANNON M
                                                                                                                                                                                                                                                                                                                                                                                                            US2002102252-A1.
                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                             24-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-AUG-2002.
                                                                                                                                                     ABS75019;
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                                                                RESULT
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    엄
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, harapper. The products of the invention have aborrive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaccutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dyspenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention
ABKI7354-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAPP-E; human; pregnancy associated plasma protein B; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.
                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy
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                                                                                                                              0.8%; Score 14.4; DB 1; Length 17;
81.2%; Pred. No. 7e+02;
tive 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 4 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                      Sequence 17 BP; 6 A; 4 C; 5 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PAPP-Ea associated 17-mer SEQ ID 543.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 146; 353pp; English.
                                                                                                                                                                                                                   1295 CCAACGAGGAGTTCAA 1310
                                                                                                                                                                                                                                                                                                                                                                 ABS75017 standard; DNA; 17 BP.
                                                                                                                                                                                                                                           2 CCAACGGGGAGUUCAA 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                          Query Match 0.83
Best Local Similarity 81.23
Matches 13; Conservative
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(SHAN/) SHANNON M E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-697817/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2002102252-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-DEC-2002
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                                                                                                                                                                                                                                                                                                                                                                                                            ABS75017;
                                                                                                                                                                                                                                                                                                                         RESULT 720
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This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, PABPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PABPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence reperseents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human CLCAl gene enzymatic nucleic acid #1610.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         288 ACTICGITCIGCACGG 303
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 93.8
les 15; Conservative
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Gaps

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287 AACTTCGTTCTGCACG 302

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Tue Nov

Page 365

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Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
                                                                                                                                                                                                                                                                                                    Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
                                                                                                                                                                                                                                             Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               enzymatic nucleic acid molecule of the invention
                                                                                                                                                                                                                                                                                                                                                   Claim 4; Page 100; 152pp; English.
                                                                                                                                                  39-AUG-2001; 2001WO-US024970.
                                                                                                                                                                         09-AUG-2000; 2000US-0224383P.
                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                          SYNTEX USA LLC
                                                                                                                                                                                                                                                                             WPI; 2002-217145/27.
                                                                                                                                                                                                                      (THOM/) THOMPSON J.
                                                                                                     WO200211674-A2.
                                                         acetylcysteine
                                                                                Homo sapiens.
                                                                                                                            14-FEB-2002
                                                                                                                                                                                                                                                         Grupe A;
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The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition cascolated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The cample acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 and a cell. This sequence represents an
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Gaps
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0
           0.8%; Score 14.4; DB 1; Length 17; 75.0%; Pred. No. 7e+02; and Mismatches 1; Indels
                                    1; Indels
                                                                                                                                               ABK57624 standard; RNA; 17 BP
                                                            146 AACGCCAGCTGTCAAT 161
                                                                         2 AACUGCAGCUGUCAAU 17
                                    Conservative
Query Match
Best Local Similarity
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Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; ABK57624
ID ABK5
XX
AC ABK5
XX
DT 02-J
XX
XX
DB Huma
XX
KW Huma
KW anti

Human CLCAl gene enzymatic nucleic acid #1995.

(first entry)

ABK57624;

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The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, consequences are useful for reducing CLCA1 activity in a cell, associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, broadhodilators, corticosteroids, antibacterials, vaccinations, acetylcyteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an
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chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic; acetylcysteine.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Enzymatic polynucleotide that down regulates expression of
                                                                                                                                                                                                                                                                                                                                                          Thompson J, Mcswiggen J, Mckenzie T, Ayers D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 4; Page 131; 152pp; English.
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                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM
                                                                                                                                                                                                                                                                                                SYNTEX USA LLC
                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-217145/27.
                                                                                                                                                                                                                                                                                              (SYNT ) SYNTEX USA (THOM/) THOMPSON J.
                                                                                                                    WO200211674-A2
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Szymkowski DE;

THOM/) INXS)

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The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (OPDD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions contributed to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, chence, are useful for treatment of a patient having a condition contributed with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The uncleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an
                                                                                                                                                                                                                                                                                                                                                                                                                                 Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WNV, West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; repplication; panoreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis; encephalitis; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.4; DB 1; Length 17;
31.2%; Pred. No. 7e+02;
ive 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WNV minus strand Inozyme substrate SEQ ID NO 10397.
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                                                                                                                                                                                                                                                                                                      Thompson J, Mcswiggen J, Mckenzie T, Ayers D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 4; Page 129; 152pp; English.
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                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM
                                                                                                                                                                                                                                   USA LLC.
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-217145/27.
                                                                                                                                                                                                                                (SYNT ) SYNTEX USA (THOM/) THOMPSON J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               West Nile Virus.
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WO200211674-A2.
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                                                  14-FEB-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                         Grupe A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACN10394
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                      Szymkowski DE;
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0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 7e+02;
Matches 14; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 8 A; 6 C; 2 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                         Ayers D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            enzymatic nucleic acid molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human CLCAl gene enzymatic nucleic acid #1931.
                                                                                                                                                                                                                                                                                                                                                                                      Mckenzie T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 4; Page 75; 152pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABK57560 standard; RNA; 17 BP
                                                                                                                                                                                   09-AUG-2001; 2001WO-US024970.
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                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen J,
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                                                                                                                                                                                                                                                                                                           SYNTEX USA LLC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-217145/27.
                                                                                                                                                                                                                                                                                                                                         THOMPSON J.
                                                                             WO200211674-A2.
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                                Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                         Thompson J,
Grupe A;
                                                                                                                                14-FEB-2002
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7e+02; ~hes 1; Indels

RESULT 725

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The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, mycoarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DMAzyme, Maberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nuclectides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
                                                                                                                                                                                                                         New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis; liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 6 A; 9 C; 1 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.4; DB 1
93.8%; Pred. No. 7e+02;
ative 0; Mismatches
                                                                                                                                                                                                                                                                                            Claim 23; SEQ ID NO 10397; 495pp; English.
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                19-OCT-2001; 2001WO-US048350.
                                                20-OCT-2000; 2000US-0242411P.
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                                                                                   RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                          Mcswiggen JA;
                                                                                                     (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Amberzyme; Zinzyme; ss
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es 15; Conserv
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                                                                                                   (BLAT/)
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of the West Nile Virus (WAV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningits, neurologic infection, hepatitis, molecule is meleciplated to WNV infection e.g. pancreatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of mucleic acid molecules further comprise at least five ribose residues, at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic molety. Nucleic acid molecules SEQ ID No 194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
                                                                                                                                                                                                   The invention relates to nucleic acid molecules that modulate replication
                                                                                                 New nucleic acid molecule that modulates replication of West Nile Virus
                                                                                                                 (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
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                                                                                                                                                                  Claim 23; SEQ ID NO 14095; 495pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 GATGACTGTTGGAACA 2
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                                                                                                                                                                                                                                                                                                                                                                                                                           invention
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                                 Mcswiggen JA;
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(MCSW/) MCSWIGGEN J A.
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(MCSW/) MCSWIGGEN J A.
                                                                WPI; 2002-706994/76
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                             Blatt L,
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ACN04335/
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New nucleic acid molecule that modulates replication of West Nile Virus

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                                                                                               The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encating a condition related to why infection e.g. pancreatitis, encaphalitis, mayorarditis, menningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least three of the S' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
(WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
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3.8%; Pred. No. 7e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 0 A; 1 C; 10 G; 0 T; 6 U; 0 Other;
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                                                            Claim 23; SEQ ID NO 4338; 495pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WNV Amberzyme substrate SEQ ID NO 6746.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    444
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         93.8%;
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Query Match
Bust Local Similarity 93.8%,
Conservative
Conservative
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                                                                                                                                                                                                                                                                                                                                                         molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Amberzyme; Zinzyme; ss
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The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (MNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, niver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at
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encephalitis, myocarditis, maningitis, neurologic infection, hepatitis, liver failure, hepatocallular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNRzyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3' ai inverted abasic moiety. Nucleic acid molecules SED ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis; liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                         0.8%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 7e+02;
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                                                                                                                                                                                                                                                                 Sequence 17 BP; 1 A; 1 C; 9 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WNV Zinzyme substrate SEQ ID NO 3650.
                                                                                                                                                                                                                                                                                                                                                                                          430 AACCATCCCCCACGCA 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACN03647 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-OCT-2001; 2001WO-US048350.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-OCT-2000; 2000US-0242411P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                               17 AACCAACCCCACGCA
                                                                                                                                                                                                                                molecule of the invention
                                                                                                                                                                                                                                                                                                                                                     15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amberzyme; Zinzyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-706994/76.
                                                                                                                                                                                                                                                                                                                                Local Similarity
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                                                                                                                                                                                                                                                                                                               Query Match
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The inventorial relates to a mover instance of the inventorial sequence.

Given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence with, after optimal alignment, at least 80 % identify to the 17 mer sequence, a sequence that their invention of them, or the corresponding RNA. The novel isolated nucleic of any of them, or the corresponding RNA. The novel isolated nucleic caids of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for the preparation of pharmaceuticals for prevention and/or treatment of viral caseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and contained the expression of the 17 mer nucleic acids in containent samples is useful for diagnosis and/or prognosis of these contained the polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein
least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytostatic, virucide, neuroprotective; nootropic; neuroleptic, gene chip, antisense, sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a novel isolated 17 mer nucleic acid sequence,
                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumour suppression related human fukutin oligo SEQ ID No 247.
                                                                                                                                                                       DB 1; Length 17;
                                                                                                                                                                                                                 1; Indels
                                                                                                                             Sequence 17 BP; 5 A; 2 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                     0.8%; Score 14.4; DB 1
75.0%; Pred. No. 7e+02;
iive 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 63; 720pp; French.
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                                                                                                                                                                                                                                                        892
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                                                                                                                                                                                                                                                                              2 GAUGACUGUUGGAACA 17
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                                                                                                                                                                                                                                                                                                                                                                                                       ABT34610 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                      877 GATGACTGTGGGAACA
                                                                                                                                                                                        Local Similarity 75.0
nes 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-313353/30.
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Matches
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chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HBR2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human, ribozyme, short interfering RNA, siRNA, HER2, K-Ras, enzymatic nucleic acid, H-Ras, N-Ras, HIV, cytostatic, anti-HIV,
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                                                                                                            0.8%; Score 14.4; DB 1; Length 17;
13.8%; Pred. No. 7e+02;
ve 0; Mismatches 1; Indels
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                                                                         Sequence 17 BP; 5 A; 2 C; 4 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                       Human HER2 DNAzyme substrate #249.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 137; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                  1174 ATCTTCTATGAGATGG 1189
                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAY-2002; 2002WO-US016840.
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                                                                                                                                                                                                                    2 Arcriciardaardd 17
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                                                                                                                           93.8%;
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                                                                                                          Query Match 0.8
Best Local Similarity 93.8
Matches 15; Conservative
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                                                                                                                                                                                                                                                                         RESULT 732
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                      Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                 Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 2 A; 8 C; 2 G; 0 T; 5 U; 0 Other;
                                                                                                                                Human K-Ras DNAzyme substrate #301.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 58; Page 90; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361 GGGGAGAGTGACCAGG 376
                                                                ABZ60189 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                               29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                            29-MAY-2002; 2002WO-US016840.
GGGGAGAGTGACCATG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACC74114 standard; DNA; 17
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                                                                                                           (first entry)
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Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                 WO200297114-A2.
                                                                                                                                                                                              Homo sapiens.
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                                                                                                           21-MAR-2003
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                                                                                     ABZ60189;
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ABZ60189/c
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The invention relates to a novel collection of cultured cells, comprising at least 5 genotypically distinct cells, where each of the at least 5 genotypically distinct cells is coisogenic with respect to the others of the at least 5 genotypically distinct cells at a target locus common among them, and where each of the at least 5 genotypically distinct cells can be separately assayed. The collection of cells is useful for identifying genotypes of a target locus that alter a cellular phenotype. The collection is also useful for pharmacogenomic studies, and in studies of structure-activity relationships of existing, and of potential new, therapeutic agents permitting multiplex analysis of the effects of amino acid changes on ligand-receptor interactions. The sequences shown in ACC733714 represent human ACC73275-ACC74126 represent human CYP2D6 targeting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel cultured cell collection comprising at least 5 genotypically distinct cells each of which is coisogenic with respect to other cells at target locus common among them, useful for identifying target locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; cultured cell; coisogenic; genotypically distinct; target locus;
ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.
                                                             cultured cell; coisogenic; genotypically distinct; target locus; (MDR1); targeting oligonucleotide; CYP2D6; ss.
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Human CYP2D6 targeting oligo SEQ ID NO: 184.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; Page 102; 112pp; English.
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                                                                                                                                                                                                                                              WO2003027264-A2
                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-JUL-2003
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                                                                                                                                                                                                                                                                                                                   03-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kmiec EB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                genotypes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC74113;
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                                                                                                        ABCB1
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Fosnaugh K;

Haeberli P, Mcswiggen J,

Chowrira B,

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antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CMS injury; spinal cord injury; cancer; melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis; restenosis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; lupus; multiple sclerosis; transplant rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human IKK-gamma substrate sequence #450.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-APR-2002; 2002WO-US010512
                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL47940 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                       745 GCCATCCGGGAAGTGT
                                                                                                                                                                                                                                                                                                                                                                                         GGCATCCGGGAAGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                     15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200281628-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             allergy; asth
substrate; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-OCT-2002
                                                                                                                                  genotypes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL47940;
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760

ВР

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The invention comprises nucleic acids (e.g. antisense oligonucleotides)
that down regulate the expression or inhibit the function of a receptor
for an eurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
IKappaB kinase (ITKK), or protein kinase PKR. The nucleic acids of the
invention are useful for treating: cerebrovascular accident, central
nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
disease, lupus, multiple sclerosis, transplant/graft rejection,
ischaemia/reperfusion injury, glomerulomephritis, sepsis, and allergic
conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
nucleic acids of the invention are also useful for down-regulating the
cypression of a target gene and as a diagnostic tool to examine genetic
drifts and mutations within diseased calls or to detect the presence of a
target RNA in a cell. The present RNA sequence represents a human IKK-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 59; SEQ ID NO 1473; 317pp; English.
05-APR-2001; 2001US-00827395.
29-MAY-2001; 2001US-0294412P.
28-AUG-2001; 2001US-0315315P.
                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gamma substrate sequence.
                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-058513/05
                                                                                                                                                                                                                                                                                         Blatt L,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel collection of cultured cells, comprising at least 5 genotypically distinct cells, where each of the at least 5 genotypically distinct cells is coisogenic with respect to the others of the at least 5 genotypically distinct cells at a target locus common among them, and where each of the at least 5 genotypically distinct cells can be separately assayed. The collection of cells is useful for identifying genotypes of a target locus that alter a cellular phenotype. The collection is also useful for pharmacogenomic studies, and in studies of structure-activity relationships of existing, and of potential new, therapoutic agents permitting multiplex analysis of the effects of amino and incompressions in the collection is also well in the collection in the collection is also useful for pharmacogenomic studies of the collection is also well in the collection in the collection is also well the collection in the collection is also well in the collection in the collection is also well than a collection in the collection is also well than a collection in the collection is also well than a collection in the collection is also well than a collection in the collection is also well than a collection in the collection is also well than a collection in the collection is also well than a collection in the collection is a collection in the collection in the collection is a collection in the collection in the collection in the collection is a collection in the collection 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel cultured cell collection comprising at least 5 genotypically distinct cells each of which is coisogenic with respect to other cells at target locus common among them, useful for identifying target locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequences shown in ACC73975-ACC74126 represent human CYP2D6 targeting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            acid changes on ligand-receptor interactions. The sequences shown in ACC79391-ACC73974 represent human ABCB1 (MDR1) targeting oligos. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 3 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 2; Page 102; 112pp; English.
                                                27-SEP-2002; 2002WO-US031180.
                                                                                                                                            27-SEP-2001; 2001US-032592P.
                                                                                                                                                                                                                                   (UYDE ) UNIV DELAWARE
                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-371919/35.
                                                                                                                                                                                                                                                                                                                               Kmiec EB, Rice MC;
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                                                                                                                                                                                                                                                                                                                                                                            degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; neoplastic disease; Addison's disease; atrophic gastritis; degenerative nervous system disease; multiple sclerosis; Alzheimer's disease; hypersensitivity disease; type I hypersensitivity; Goodpasture's syndrome; type IV hypersensitivity; Goodpasture's syndrome; type IV hypersensitivity; leprosy; infectious disease; viral infection; HIV; fungal infection; Candida; parasitic infection; schistosome; filaria; bacterial infection; Mycobacterium; neoplastic disease; lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
                                                                       Gaps
                                                                     0;
                                                                                                                                                                                                                                                                                                                                                              human; T-cell associated disease; Vbeta; autoimmune disease;
                                0.8%; Score 14.4; DB 1; Length 17;
33.8%; Pred. No. 7e+02;
Ive 0; Mismatches 1; Indels
Sequence 17 BP; 4 A; 4 C; 8 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                              Human Vbeta gene repeat sequence #496.
                                                                                                                                                                                                                          BP
                                                                                                     922 CIGITCCAGCIGCICC 937
                                              93.8%;
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                                                                                                                                                                                                                          ADH70706 standard; DNA; 17
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                                                                   15; Conservative
                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       breast cancer; ds
                                                                                                                                                                                                                                                                                              25-MAR-2004
                                                                                                                                                                                                                                                            ADH70706;
                                                                                                                                       16
                                   Query Match
                                                                                                                                                                                          RESULT 737
                                                                 Matches
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US2002150891-A1.

17-0CT-2002.

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simple repeat sequence (CAC) which can be used for genetic fingerprinting by blot-hybridisation of a DNA specimen. The oligonucleocide is useful in molecular biology, forensic medicine, criminology, e.g. for establishing blood relationship in family analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #12.
                                                                                                                                                                                                                                                                                                                                                             Collection for genome finger-printing - by using specified sequence as
                                                                                                                                                                                                                                                                                                                                                                                                                                                              This sequence represents a biotinylated-oligonucleotide containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Identification; genetic target; gene modulation; human; probe; antisense oligonucleotide; phosphorothioate; PCR primer; nucleotide sequence-based technology; antisense drug discovery; target validation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sasmor HM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 5 A; 12 C; 0 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.4; DB 1;
93.8%; Pred. No. 7.4e+02;
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Vickers TA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                Oreshkova SF;
                  /*tag= c
/note= "biotinylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cowsert LM, Baker BF, Mcneil J,
Ohasi C, Wyatt JR, Borchers AH,
                                                                                                                                                                                                                                      (VEKT=) VEKTOR RES PRODN ASSOC.
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                                                                                                                                                           92SU-05056570
                                                                                                                                                                                                92SU-05056570
                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Col 7; 5pp; Russian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US008268
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                                                                                                                                                                                                                                                                                Karpyshev NN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 crecrecrecrec 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                  the oligo:nucleic probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                        WPI; 1998-085156/08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
modified_base
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                                                                                                                                                                                                                                                                                Korokhov NP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-JAN-2000
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                                                                                                                                                           17-MAR-1992;
                                                                                                                                                                                                  17-MAR-1992;
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                                                                             RU2081919-C1
                                                                                                                     20-JUN-1997.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ41020;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sclerosis and Alzheiner's disease. Hypersensitivity diseases include Type I hypersensitivities such as contact with allergens that lead to allergies. Type II hypersensitivities such as those present in doodpasture's syndrome and Type IV hypersensitivities such as those manifested in leprosy. Infectious diseases include viral infections caused by viruses such as HIV, fungal infections such as those caused by schistosomes, filaria and bacterial infections such as those caused by Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
                                                                                                                                                                                                                                                         autoimmune, degenerative nervous system and infectious disease, comprises nucleic acid primers specifically priming and allowing amplification of a Vbeta gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        graft versus host disease, hypersensitivity diseases, infectious diseases and neoplastic diseases. Autoimmune diseases include Addison's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atrophic gastritis. Degenerative nervous system diseases include multiple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  such as leukaemias, lymphomas and cancers such as cancer of the brain, breast. The present sequence represents a Vbeta gene repeat sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a kit for diagnosing and treating T-cell associated diseases which comprises a panel of nucleic acid primers specifically priming and allowing amplification of each Vbeta gene, VbetaRNA or CDNA. The kit is useful gradiagnosing organ transplant rejection and diagnosing and treating T-cell associated diseases including autoimmune diseases, degenerative nervous system diseases.
                                                                                                                                                                                                                                        Kit for diagnozing and treating T-cell associated diseases e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 6 A; 11 C; 0 G; 0 T; 0 U; 0 Other;
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/*tag= b
/note= "repeated 2-8 times"
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                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 900; 164pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                *tag= a
note= "biotinylated'
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   230 GTGGTGGTGGTGGCGG 245
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  99US-00263959
                                       94US-00309335.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15; Conservative
                                                                                                                                                                                                  WPI; 2004-059052/06
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Best Local Similarity
                                                                                                                                                               Rowen L;
                                                                                                    ы
                                                                                                                       ROWE/) ROWEN L.
                                                                                                    HOOD (/000H
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modified_base
  05-MAR-1999;
                                       19-SEP-1994;
19-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUN-1998
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RESULT 738

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Matches

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Gaps

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Brooks DG;

10017621-381.rng

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Bennett CF, Cowsert LM, Ackermann EJ;
                                                            03-DEC-1998;
                                                      JS5958771-A.
                                       임
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A method has been developed of defining a set of compounds that modulate the expression of a target nucleic acid (tNA) sequence via binding of the compounds with the tNA sequence. The method comprises generating a library of virtual compounds in silico according to defined criteria, and according to defined criteria. Also described are: (1) a method of defining a set of Oligonucleotides (ONS) that modulate the expression of a tNA sequence via binding of the ONS with the tNA sequence via binding of the ONS with the tNA sequence comprising generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual ONS with the tNA according to defined criteria; and (2) a method of defining a set of compounds that modulate the expression of a tNA sequence via binding of the compounds with the tNA. The methods can be used for the generation
provide compounds having defined physical, chemical or bioactive properties, e.g. antisense activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and identification of synthetic compounds having defined physical, chemical or bioactive properties. Information gathered from assays of such compounds is used to identify nucleic acid sequences that are tractable to a variety of nucleotide sequence-based technologies, e.g. antisense drug discovery and target validation. AAZ40852 to AAZ41220, and AAY52701 to AAY52706, represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                        Example 21; Page 100; 264pp; English.
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Gaps
                                     ;
0
0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                       513 CCTGGAGAGCTGACC 528
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Matches 15; Conserv
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   Query Match
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Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #23423. AAZ22114 standard; DNA; 18 (first entry) 26-NOV-1999 AAZ22114;

Cellular Inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic; c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss. Synthetic.

Homo sapiens

28-SEP-1999

98US-00205144. 03-DEC-1998;

98US-00205144

(ISIS-) ISIS PHARM INC.

WPI; 1999-561046/47.

AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ7744 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and

Claim 8; Page 1311; 2745pp; English.

Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2 useful for e.g. diagnostics, therapeutics, and as research reagents.

Claim 3; Col 39; 33pp; English

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        The invention provides antisense compounds of 8-30 nucleotides that inhibit the expression of human Cellular Inhibitor of Apoptosis-2 (c-IAP-2). The antisense compounds may be used for diagnostrie, therapeutics (for modulating the expression of c-IAP-2), prophylaxis (e.g. to prevent or delay infection, inflammation, or tumor formation), as research and in kits. Sequences AA22210-142 represent phosphorothicate oligonucleotides used for antisense inhibition of cellular inhibitor of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                 Human biallelic marker upstream amplification primer SEQ ID NO:5066.
                                                                                                                                                                                                                                                                                                                                                                                                                       Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
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                                                                                                                                            Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
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13.8%; Pred. No. 7.4e+02;
.ve 0; Mismatches 1;
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98US-0109732P.
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Best Local Similarity 93.8°
Matches 15; Conservative
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                                                                                                                     apoptosis-2
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The present invention relates to an antisense compound of up to 30 mucleobases in length, which specifically hybridises with and inhibits the expression of human steroid receptor coactivator-1 (SRC-1) (also known as F-SRC-1 and NGOA-1) gene. The antisense compounds are useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The antisense oligomolectides are useful for treating an animal, particularly a human, suspected of having or being prone to a disease or condition associated with the expression of SRC-1. In particular, the antisense oligomolectides are useful for preventing delaying or treating infection, inflammation or tumour formation. The present sequence is an antisense oligomucleotide, ISIS# 29895, targetted to human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a method of toxicological diagnosis, involving taking a DNA-containing sample from an organism or cell culture that has been treated with a test compound and determining any changes in the DNA methylation status or pattern caused by said test compound. The method is used for diagnosis and prognosis of adverse toxic responses in individuals. The present sequence is a PCR primer used to demonstrate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Toxicological diagnosis, useful for diagnosis and prognosis of adverse reactions, based on effect of test compounds on methylation status of selected genes, involves determining changes in DNA methylation status.
                           New antisense oligonucleotides for inhibiting the expression of human steroid receptor coactivator-1, particularly useful for preventing, delaying or treating infection, inflammation or tumor formation.
                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                    Claim 3; Col 43; 36pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                  152 AGCTGTCAATGACACT 167
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WPI; 2001-638016/73.
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                                                                                                                                                                                                                                                                                                                                      Human; antisense; steroid receptor coactivator-1; SRC-1; F-SRC-1; NcoA-1; diagnostic; therapeutic; prophylaxis; infection; inflammation; cytostatic; tumour formation; antiinflammatory; antibacterial;
  not actually given a sequence in the Sequence Listing from the
                                                                                                   Gaps
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                                                                    0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                             Antisense oligo, ISIS# 29895, targetted to human SRC-1 DNA
                                                                                                Indels
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/note= "Phosphorothioate backbone"
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/mod_base= m5c
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              present invention
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                                                                                                                                                                                                                                                                                  03-JAN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
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                                                                       Query Match
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Matches
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Page 375

Human, ss; astrocytoma, cytostatic; staging, cysteine methylation, CpG; bisulphite; brain tissue; MALDI; ESI; electron spray mass spectrometry; matrix assisted laser desorption/ionization mass spectrometry; primer. Novel chemically modified genomic DNA sequences, useful in the characterization, classification, differentiation, grading, staging, treatment and/or diagnosis of astrocytomas or predisposition to Length 18; 1; Indels Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other; / Match 0.8%; Score 14.4; DB 1; Local Similarity 93.8%; Pred. No. 7.4e+02; nes 15; Conservative 0; Mismatches 1; Berlin K; Example; Page 26; 37pp; English. 774 CCTCAAACACGCCAAC 789 ABK34171 standard; DNA; 18 BP 02-JUL-2001; 2001WO-EP007538. 30-JUN-2000; 2000DE-01032529. 01-SEP-2000; 2000DE-01043826. 18-JUN-2002 (first entry) 16 CCTCAAACACCCCAAC Human UNG PCR primer #1. method of the invention Olek A, Piepenbrock C, (EPIG-) EPIGENOMICS AG WPI; 2002-171649/22 WO200202808-A2. astrocytomas. Homo sapiens 10-JAN-2002 ABK34171; Query Match Matches ABK34171, ò

The invention relates to a nucleic acid comprising a sequence (I) of at least 18 bases in length of a segment of chemically pre-treated genomic CO least 18 bases in length of a sequences of (ABX3399-ABX3402) or its complement. Also included are an oligonuclectide or peptide nucleic acid (or set thereof) of at least 9 nuclectides which hybridises to (I), probes for detecting cytosine methylation or singlenuclectide polymorphisms (SNP) in (I), an array of oligomers or peptide nucleic acids for analysing diseases associated with the methylation cancer and properties and of experience of the CpG dinuclectides of (I). The array is useful for determining genetic and/or epigenetic parameters, classification, differentiation, grading, staging, treatment and/or diagnosis of astrocytomas, or the predisposition to astrocytomas by analysing cytosine completions, involves obtaining a biological sample containing genomic DNA, extracting the genomic DNA, converting cytosine bases which are unmethylated at the 5-position, in the genomic DNA sample, to uracil or behaviour, by chemical treatment and amplifying chemically pre-treated concerns of the array and a polymerase, where the concerns of a detectable label. The method further involves concentificates carry a detectable label. The method further involves concentificates carry a detectable label. The method further involves concentifying methylation status of one or more cytosine positions, and analysing methylation status of the cytosine positions by using a concern more data sets. The genomic DNA is chemically treated by using a

complifies DNA which is of particular interest in astrocytoma or brain citisme, based on the specific genomic methylation status of brain citisme, based on the specific genomic methylation status of brain citismes, as opposed to background DNA. The amplificates carry a fluorescent label or radionuclide. Optionally, the labels of the amplificates are detected in a mass spectrometer. The fragments of chemically contracted genomic DNA to be amplified, have a single positive or preferably, the amplificates or fragments of the amplificates are catected by matrix assisted laser description/ionization mass spectrometer. Preferably, the amplificates or fragments of the amplificates are detected by matrix assisted laser description/ionization mass spectrometry (MALDI) or using electron spray mass spectrometry (ESI). The present cate containing a methylated cytosine from one of the chemically pre-treated reference DNA samples of the invention. Note: The sequence data for this patent did not form part diversity from with a particular containing a methylatical distriction in the mass spectrometry containing a methylatical containi directly from WIPO at ftp.wipo.int/pub/published pct sequences Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;

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Gaps

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Gaps .. 0 0.8%; Score 14.4; DB 1; Length 18; 3.8%; Pred. No. 7.4e+02; 1; Indels 0; Mismatches 93.88; 15; Conservative Local Similarity Query Match Matches

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789 16 ccrcaaacaccccaac 1 774 CCTCAAACACGCCAAC ð Db

ABK28109 standard; DNA; 18 BP ABK28109; RESULT 745 ABK28109/

Human UNG methylation state PCR primer #1. 09-APR-2002 (first entry)

Human, ss; astrocytoma; oligoastrocytoma; oligodendroglioma; antitumour; cytostatic; cytosine methylation state; single nucleotide polymorphism; SNP; CpG; brain tumour; PCR; primer.

Homo sapiens.

WO200200705-A2.

02-JUL-2001; 2001WO-EP007539. 03-JAN-2002.

30-JUN-2000; 2000DE-01032529. 01-SEP-2000; 2000DE-01043826.

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2002-139900/18.

Oligonucleotide for diagnosing and treating tumors and cancer especially gliomas, astrocytomas and oligodendromas, comprises chemically modified genomic sequences of genes associated with tumors and cancers.

Example 4; Page 23; 31pp; English.

least 18 bases of a segment of chemically pretreated genomic DNA (II) according to one of the sequences (S1) selected from 120 sequences, and its complementary sequences. Also included are an oligomer (III), especially an oligomucleotide or peptide nucleic acid (PNA)-oligomer, comprising a sequence of at least 9 nucleotides which hybridises to or is identical to (II), and complementary sequences, a set of oligomers (IV) The invention relates to a nucleic acid (I) comprising a sequence of

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comprising at least two (III) and their use for detecting the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) in (II), and manufacturing (MI) an arrangement of different oligomers (array) fixed to a carrier material for analysing diseases associated with the methylation state of the CpG dinucleotide of (SI), where at least one oligomer is coupled to solid phase. The set of oligomers (IV) are useful as primer oligomicleotides for the amplification of (II) especially for characterising classifying and differentiating oligodendroglioma, astrocytoma and oligoastrocytoma tumours (by ascertaining genetic and/or apprenenters of genomic DNA by analysing cytosine methylation and single nucleotide polymorphisms). The present sequence is a PCR primer used to amplify the modified genomic sequence from a gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; steroid receptor coactivator-1; SRC-1; antisense compound; diagnostic; therapeutic; prophylaxis; antisense therapy; antisense; phosphorothioate backbone; ss.
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/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
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                                                                                                                                                                                                  Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                  The invention relates to antisense compounds, compositions and methods for modulating the expression of human steroid receptor coactivator-1 (SRC-1). The compositions comprise antisense oligonucleotides targetted to nucleic acids encoding SRC-1 in human cells or tissues. It is also useful for treating a human having a disease or condition associated with SRC-1, by inhibiting expression of SRC-1 in It is also useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. It is also used in antisense therapy. The present sequence is an antisense oligonuclectick to human SRC-1 DNA. This sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Haematopoietic cell proliferation disorder related oligonucleotide #1048.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J; Jolek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu B; Lewin A, Lippscher E, Maier S, Model F, Mueller V, Otto T, Pelet C; Schwope I, Ziebarth H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                       Novel antisense compound targeted to nucleic acid molecules encoding human steroid receptor coactivator-1 (SRC-1), useful for inhibiting expression of SRC-1 in human cells or tissues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; haematopoietic cell proliferation disorder; cytostatic; gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia; cytosine methylation state; probe; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.4; DB 1; Length 18; 33.8%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18 BP; 6 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                    used in the exemplification of the invention
                                                                                           Cowsert LM;
                                                                                                                                                                                                                       Example 15; Page 79; 103pp; English.
                                          ISIS PHARM INC.
BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   152 AGCTGTCAATGACACT 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-MAR-2001; 2001US-0278333P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-MAR-2002; 2002WO-EP003401.
           27-NOV-2000; 2000US-00723379.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCTGTCAATGTCACT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABZ10908 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                           O'malley BW, Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-018942/01
                                                                                                                         WPI; 2002-537447/57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
les 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200277272-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABZ10908;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                          (ISIS-)
(BAYU)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated CpG dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118 represent specifically claimed nucleotide sequences from the present invention. Oligonocleotides from the present invention and between healthy haematopoictic cells and proliferative disorder haematopoictic cells, for differentiating between acute lymphocytic leukaemia and acute myelogenous leukaemia, as probes for determining the cyrosine methylation state and/or single nucleotide polymorphisms (SNPs) of haematopoietic cell proliferation disorder related bNA sequences and their complements; and as primers for the application of haematopoietic cell proliferation between complements. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between subject sequences. The nucleotide sequences from the present method enables a highly specific classification of haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative disorders. disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides. enables a Detecting and differentiating between hematopoietic cell proliferative Claim 15; Page 69; 117pp; English.

Length 18; Seguence 18 BP; 1 A; 0 C; 10 G; 7 T; 0 U; 0 Other; Query Match 0.8%; Score 14.4; DB 1; Best Local Similarity 93.8%; Pred. No. 7.4e+02; Matches 15; Conservative 0; Mismatches 1;

; 0

Gaps

0,

1; Indels

240 18 225 TGAGAGTGGTGGTGGT 3 readecrecrecrecr à g

ADA20557 standard; DNA; 18 BP 20-NOV-2003 (first entry) ADA20557;

Prostate tumour related gene UBB PCR primer #2.

single nucleotide polymorphism; SNP; prostate carcinoma; ss; primer; PCR. cytostatic; gene therapy; genetic marker; epigenetic parameter; classification; differentiation; diagnosis; prostate tumour; prostate cancer; cytosine methylation; uracil;

Homo sapiens

WO2002103042-A2

27-DEC-2002

14-JUN-2002; 2002WO-EP006605

14-JUN-2001; 2001DE-01028508 (EPIG-) EPIGENOMICS AG

Distler J,

Adorjan P;

WPI; 2003-167536/16.

Determining genetic and/or epigenetic parameters, useful for the classification, differentiation and/or diagnosis of prostate tumors or a

The invention relates to a novel method for characterising, classifying and/or differentiating renal and prostate cancer. The method comprises extracting genomic DNA from a biological sample, converting cytosine bases (by chemical treatment) that are unmethylated at the 5-position to

prostate cancers, by analyzing the genetic and/or epigenetic parameters of genomic DNA, particularly by determining its cytosine methylation status. Method for characterizing, classifying and/or differentiating renal and

Distler J, Model F, Adorjan P;

WPI; 2003-183991/18.

(EPIG-) EPIGENOMICS AG

Example 2; Page 19; 211pp; English.

ö The invention relates to a method of determining genetic and/or epigenetic parameters for the classification, differentiation and/or diagnosis of prostate tumours or the predisposition to prostate cancer, by analysing cytosine methylation in a sample of genomic DNA. The method comprises chemically treating unmethylated cytosine bases at the 5-position to uracil or another base, which is dissimilar to cytosine in terms of hybridization behaviour; followed by amplifying at least one fragment of the chemically pre-treated genomic DNA using sets of primer oligomucleotides and a polymerase. The oligomers or probes derived from them are useful for detecting the methylation state of all CpG renal cancer; prostate cancer; cytosine methylation; single nucleotide polymorphism; histological; cytological; ss; primer; dinucleotides and/or single nucleotide polymorphisms (SNPs) in a chemically pre-treated genomic DNA. They are all useful for treating prostate carcinoma. This sequence represents an oligonucleotide used tamplify a gene possibly involved in predisposition to prostate cancer Gaps predisposition to prostate cancer, comprises analyzing cytosine which may contain methylated or unmethylated CpG dinucleotides . 0 0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other; Example 2; Page 19; 376pp; English 774 CCTCAAACACGCCAAC 789 BP 14-JUN-2002; 2002WO-EP006603. 14-JUN-2001; 2001DE-01028509. 16 ccrcaacaccccaac 1 ADA84360 standard; DNA; 18 (first entry) Conservative Human UNG PCR primer 1. Local Similarity WO2002103041-A2. Homo sapiens. methylation. 20-NOV-2003 27-DEC-2002. 15; ADA84360; Query Match RESULT 749 Matches ADA84360/ ò

hyperglycemia or hypocalcaemia; for treating obesity, impaired glucose

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chemically pretreated genomic DNA using sets of primer oligonucleotides and a polymerase. The method is useful for detecting the cytosine methylation state and/or single nucleotide polymorphisms in genomic DNA, particularly for characterising, classifying and/or differentiating renal particularly for characterising, classifying and/or differentiating renal and prostate cancers. The oligomers are useful as primer oligonucleotides for the amplification of any of the 112 DNA sequences of the invention. The set of oligomer probes is useful for detecting the cytosine methylation state and/or single nucleotide polymorphisms in any of the 112 chemically pretreated genomic DNA sequences. The method is also useful for identifying the tissue of origin of cancer cells. The method allows the classification, differentiation and/or diagnosis of cancer tissues using minute samples which would be inadequate for histological or cytological analysis. The present sequence is used in the exemplification of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Composition useful for altering gluconeogenesis or glucose production in
the treatment of e.g. insulin resistance or cardiovascular disease
comprises an agent which modulates short heterodimer partner expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Primer; amplify; PCR; PEPCK; phosphoenolpyruvate carboxykinase; SHP; short heterodimer partner; Zucker; diabetic; fatty; rat; ZDF; insulin; gluconeogenesis; glucose production; hyperglycemia; hypocalcaemia; obesity; glucose tolerance; insulin resistance; metabolic syndrome X; Type 2; diabetes; Type 1; cardiovascular disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                Gaps
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0
                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.4; DB 1; Length 18; ilarity 93.8%; Pred. No. 7.4e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Way JM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                    774 CCTCAAACACGCCAAC 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-DEC-2001; 2001US-0344876P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-DEC-2002; 2002WO-US040360.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       cercháncacecechae 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABQ80440 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Primer: Rat PEPCK forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Goodwin BJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-627344/59.
                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABQ80440;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 750
                                                                                                                                                                                                                                                                                                                                                                                Matches
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           8$8888888888888888
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The sequences given in ABQ80440-45 are primers and probes which were used to determine PEPCK (phosphoenolpyruvate carboxykinase) and SHP (short heterodimer partner) expression in Zucker diabetic fatty (ZDF) fa/fa rats treated with insulin. The composition of the invention for alteration of gluconeogenesis or glucose production comprises an agent which modulates SHP expression or activity. The composition is used for altering gluconeogenesis or production of glucose useful for treating

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          tolerance, insulin resistance, metabolic syndrome X, Type 2 diabetes, Type 1 diabetes, or cardiovascular disease. The agent induces, increases, inhibits or decreases expression or activity of SHP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "Phosphorothioate backbone; All cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to antisense compounds targetted to a nucleic acid
                                                                                                                                                                                                                                                                                                                                Human, antisense, cellular inhibitor of apoptosis-2; c-IAP-2; cancer;
hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease;
API-1; hIAP-1; MIHC; gene therapy; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound, preferably an oligonucleotide, for inhibiting expression of human Cellular Inhibitor of Apoptosis-2 in human cells ctissues, and for treating diseases, such as cancer or an autoimmune
                                                                                                                Gaps
                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE) nucleotides"
15. 18
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/mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                     Length 18;
                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                            Human c-IAP-2 antisense oligonucleotide #ISIS #23463.
                                                             Sequence 18 BP; 5 A; 0 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                     Score 14.4; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cowsert
                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 3; Page 22; 34pp; English.
                                                                                                                                        1481 TCCACAAACTTCCTGA 1496
                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-OCT-2001; 2001US-00857299.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-JUL-2002; 2002US-00197290.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99WO-US022083
                                                                                         0.8%;
                                                                                                  93.8%;
                                                                                                                                                                rccacaacriccica 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bennett CF, Ackermann EJ,
                                                                                                                                                                                                                              AAD60490 standard; DNA; 18
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                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .18
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BENN/) BENNETT C F.
(ACKE/) ACKERMANN E J.
(COWS/) COWSERT L M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-755119/71.
                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2003083300-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                     modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modified base
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                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                  18-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                 16
                                                                                                                                                                                                                                                         AAD60490;
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                                                                                                                                                                                                         RESULT 751
                                                                                                                 Matches
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encoding human cellular inhibitor of apoptosis-2 (also known as c-IAP-2, apoptosis inhibitor 2, API-1, hIAP-1 and MIHC) to inhibit its expression. Antisense compounds of the invention are used to induce apoptosis in
                                                                       human cells or tissues to treat diseases or conditions associated with insufficient apoptosis. They are used to treat diseases or conditions associated with cancer or autoimmune diseases. The invention is also useful in antisense gene therapy. The present sequence is an antisense oligonucleotide targetted to human c-IAP-2 DNA
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Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

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0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02; ative 0; Mismatches 1; Indels
                                0;
                                                                 513 CCTGGAGAGCTGACC 528
                                                                                                ccredadaderrdacc 1
             Local Similarity 93.8
   Query Match
                                  Matches
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0;

Gaps

٥;

16 g

324/c ADJ58324 standard; DNA; 18 BP. Primer of the invention #3 06-MAY-2004 (first entry) ADJ58324; RESULT 752

polymorphism; chum salmon; haplotype; primer; ss.

Synthetic.

EP1319721-A1

18-JUN-2003

12-DEC-2002; 2002EP-00258583.

13-DEC-2001; 2001JP-00379926

(NISN) NISSHINBO IND INC

Urano A, Suzuki O, Moriya S, Ichihara T,

Abe S;

WPI; 2003-629114/60.

Kit for determining haplotype of chum salmon, has substrate with immobilized oligonucleotides that detect polymorphisms in mitochondrial DNA control region of chum salmon, by hybridization with chum salmon nucleic acid.

Disclosure; SEQ ID NO 67; 44pp; English.

The present invention relates to a kit for determining haplotype of Oncorhynchus keta, comprising oligonucleotide-immobilized substrate obtained by immobilizing, on substrate, one or more kinds of oligonucleotides that enable detection of polymorphism in a nucleotide sequence of mitochondrial DNA control region of chum salmon, by hybridization, and determining haplotype based on polymorphism or combination of polymorphisms. The oligonucleotides are useful for determining a haplotype of chum salmon by hybridizing a nucleic acid derived from the chum salmon with each oligonucleotide contained in the kit, detecting the presence or absence of formation of a hybrid of each oligonucleotide and the nucleic acid derived from the chum salmon and identifying a polymorphism in the nucleotide sequence of the chum salmon mit cohondrial DNA control region. The present sequence represents a primer of the invention.

Sequence 18 BP; 4 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                 Addison's disease; atrophic gastrilis; degenerative nervous system disease; multiple sclerosis; degenerative nervous system disease; multiple sclerosis; Allaheimer's disease; hypersensitivity dosease; type I hypersensitivity; dosepasture's syndrome; type II hypersensitivity; dosepasture's syndrome; type II hypersensitivity; dosepasture's syndrome; HIV; fungal infection, Candida; parasitic infection; schistosome; filaria; bacterial infection; Mycobacterium; neoplastic disease; lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
                      Gaps
                                                                                                                                                                                                                              degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; neoplastic disease;
                       .
0
                                                                                                                                                                                                                    human; T-cell associated disease; Vbeta; autoimmune disease;
                      1; Indels
Score 14.4; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 1;
                                                                                                                                                                                              Human Vbeta gene repeat sequence #517.
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                                                                                                                           BP
                                              615 CTACATTAAGCTGGAC 630
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95US-00531241.
 0.8%;
          93.8%;
                                                                  CTACATTAAGCAGGAC 2
                                                                                                                          ADH70727 standard; DNA; 18
                                                                                                                                                                       (first entry)
 Query Match 0.8
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                breast cancer; ds
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E
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                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HOOD/) HOOD
(ROWE/) ROWEN
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                                                                                                                                                                       25-MAR-2004
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                                                                                                                                                ADH70727;
                                                                  17
                                                                                                    RESULT 753
                                                                                                               ADH707
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autoimmune, degenerative nervous system and infectious disease, comprises nucleic acid primers specifically priming and allowing amplification of a Kit for diagnozing and treating T-cell associated diseases e.g. Wheta gene.

WPI; 2004-059052/06.

Rowen L;

Hood LE,

Disclosure; SEQ ID NO 921; 164pp; English.

The invention relates to a kit for diagnosing and treating T-cell associated diseases which comprises a panel of nucleic acid primers specifically priming and allowing amplification of each Vbeta gene, betaRNA or CDNA. The kit is useful for diagnosing organ transplant rejection and diagnosing and treating T-cell associated diseases. The coluding autoimmune disease, hypersensitivity diseases, infectious diseases, and neoplastic diseases. Autoimmune diseases include Addison's disease, atrophic gastritis. Degenerative nervous system diseases include multiple scheous and Alzheiner's disease. Hypersensitivity diseases include Type atrophic gastrities such as contact with allergens that lead to allergies, Type II hypersensitivities such as those present in Goodpasture's syndrome and Type IV hypersensitivities and as those caused by viruses such as HIV, fungal infections such as those caused by the yeast genus Candida, parasitic infections such as those caused by

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material for the label of the invention.
                                                                                                                                                                   RESULT 755
                                                                             Matches
 SXS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention describes a molecule (M) for labelling a target material, comprising a conjugate of a transition metal compound with a detectable group, the conjugate having the general structural Formula (I), its tautomers, salts, and acids. (M) is useful for detecting a target material, for imparting a detectable property to a target material, for monitoring a binding process, for monitoring a reaction, for isolating a target material of interest, and for detecting one or more molecules that include a target sequence. The two transition metal chelates are useful for labelling, detecting, and analysing target materials containing oligohistidine target. (M) binds with high affinity and specificity to oligohistidine target sequences, particularly hexahistidine target sequence encodes an oligohistidine suitable as a target
schistosomes, filaria and bacterial infections such as those caused by Mycobacterium. Neoplastic diseases include lymphoproliferative diseases such as leukaemias, lymphomas and cancers such as cancer of the brain, breast. The present sequence represents a Vbeta gene repeat sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Molecule useful for labeling target material, for detecting target material and for imparting detectable properties to target material, comprises conjugate of transition metal compound with detectable group.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Labeling molecule associated oligohistidine
                                                                                                                                                                                                                                                                                                                                      labelling molecule; conjugate; transition metal compound;
detectable group; labelling; detection; hexahistidine target sequence;
                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                            Labelling molecule associated oligohistidine target molecule DNA.
                                                                                                                   .
0
                                                                                       Query Match 0.8%; Score 14.4; DB 1; Length 18; Best Local Similarity 93.8%; Pred. No. 7.4e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /partial
/note= "No start or stop codon"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RUTF ) UNIV RUTGERS STATE NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 3; Page 20; 41pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   target molecule"
                                                                                                                                          230 GTGGTGGTGGTGGCGG 245
                                                                                                                                                                                                                      ADO49036/c
ID ADO49036 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-2003; 2003US-00665227.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-NOV-2002; 2002WO-US036180
                                                                                                                                                                   crecrecrecrec 2
                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= a
/product=
                                                                                                                                                                                                                                                                                   12-AUG-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ebright YW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-447681/42.
                                                                                                                                                                                                                                                                                                                                                                 oligohistidine; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P-PSDB; ADO49029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2004096887-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ebright RH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                   11
                                                                                                                                                                                                                                                           ADO49036;
                                                                                                                                                                                                         RESULT 754
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a method for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the parent polynucleotide for replacement with a synonymous codon, where the synonymous codon is selected on the basis that it exhibits a different phenotypic preference than the first codon in a comparison of phenotypic preference than the first codon in a comparison of phenotypic preference than the first where the test organism are selected from organisms of parts, where the corganism of interest and organisms that are related to the organisms of interest, and (b) replacing the first codon with the synonymous codon to construct the synthetic polynucleotide. Also described: (1) a method for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        determining the phenotypic preference of a first codon in an organism of interest or its parts; (2) a synthetic polynucleotide constructed from the method above; (3) an organism or interest or part containing a synthetic polynucleotide constructed from the method above; (4) an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Constructing synthetic polynucleotide for modulating the guality of a selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide.
                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                phenotype; phenotypic preference; phenotype modulation; leader; ds.
                                                                                                                                                                    .
0
                                                                           Score 14.4; DB 1; Length 18; Pred. No. 7.4e+02;
                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic leader sequence encoding DNA SEQ ID NO:49.
Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; SEQ ID NO 49; 86pp; English.
                                                                                                                                                                                                                                                         230 GTGGTGGTGGTGCCGG 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AD026656 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-NOV-2002; 2002US-0425163P.
                                                                           Query Match

Ouery Match

Best Local Similarity 93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-NOV-2003; 2003WO-AU001487
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                                                                                                                                                                                                                                                                                                                                         18 dredredredred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                         15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYQU ) UNIV QUEENSLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-411519/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P-PSDB; AD026657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2004042059-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-AUG-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Frazer IH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AD026656;
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encodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynucleotide that encodes the polypeptide; and (7) a method of reducing the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynucleotide that encodes the polypeptide. The method is useful for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. It is useful for modulating the quality of a selected same polypeptide is no organism or part. The present sequence encodes a synthetic leader sequence, which is used in an example from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                 invention.
      $$$$$$$$$$$$$$$$$$$$
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Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;

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Gaps
                     .
0
0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02;
                     1; Indels
                    0; Mismatches
                                          245
                                        230 GTGGTGGTGGCGG
                     Conservative
        Similarity
Mar
Local S.
15;
Query Match
                     Matches
                                          à
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2 Greeregreereg 17 qq

ADO26694 standard; DNA; 18 BP 12-AUG-2004 (first entry) AD026694; AD026694/c

Synthetic leader sequence encoding DNA SEQ ID NO:87.

phenotype; phenotypic preference; phenotype modulation; leader; ds.

Synthetic.

WO2004042059-A1

21-MAY-2004

10-NOV-2003; 2003WO-AU001487.

08-NOV-2002; 2002US-0425163P.

(UYQU) UNIV QUEENSLAND

Frazer IH;

WPI; 2004-411519/38. P-PSDB; ADO26695.

Constructing synthetic polynucleotide for modulating the quality of a selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide. Example 1; SEQ ID NO 87; 86pp; English. The present invention describes a method for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the parent polynucleotide for replacement with a synonymous codon, where the parent polynucleotide for replacement with a synonymous codon, where the synonymous codon is selected on the basis that it exhibits a different phenotypic preference than the first codon in a comparison of phenotypic preference than the first codon in a comparison of phenotypic preferences in test organisms or parts, where the test organism are selected from organisms of the same species as the organism of interest and organisms that are related to the organisms of interest; and (b) replacing the first codon with the synonymous codon to construct

the synthetic polynucleotide. Also described: (1) a method for determining the phenotypic preference of a first codon in an organism of interest or its parts; (2) a synthetic polynucleotide constructed from the method above; (3) an organism or interest or part containing a synthetic polynucleotide construct that comprises a regulatory polynucleotide operably linked to a tandem repeat comprises a regulatory polynucleotide operably linked to a tandem repeat of a first codon tused in frame with a reporter polynucleotide operably linked to a tandem repeat of a first codon tused in frame with a reporter polynucleotide that encodes a reporter protein, which produces, or is predicted to produce a selected phenotype in the organism or part; (5) a method of modulating the quality of a selected phenotype that is displayed by an organism of interest or part encodes the polypeptide; (6) a method of enhancing the quality of a cencodes the polypeptide; (6) a method of enhancing the quality of a cencodes the polypeptide; (6) a method of reducing the quality of a cencodes the polypeptide; (7) a method of reducing the quality of a cencodes the polypeptide; (7) a method of reducing the quality of a cencodes the polypeptide. The method is useful for constructing a conferted phenotype that is displayed by an organism of interest or part or part or selected phenotype to an organism of interest or part in a different organism to organism of interest or part in a different conferted phenotype to an organism of interest or part in a different conferted phenotype to an organism of interest or part in a different conferted phenotype ting useful for modulating the quality of a selected phenotype displayed by an arent polymucleotide that encodes the polypeptide. It is useful for modulating the quality of a selected phenotype displayed by an organism or part. The present sequence encodes the polypeptide is producing the present encodes the polypeptide.

Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;

.. 0 Gaps . 0 0.8%; Score 14.4; DB 1; Length 18; 33.8%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels 93.8%; Conservative Local Similarity 15; Query Match Matches

230 GTGGTGGTGGTGCGG 245 16 GTGGTGGTGGTGG 1 qq ਨੇ

ADO26714 standard; DNA; 18 BP. AD026714; RESULT 757 AD026714/

(first entry) 12-AUG-2004

Synthetic leader sequence encoding DNA SEQ ID NO:107.

phenotype; phenotypic preference; phenotype modulation; leader; ds.

Synthetic.

WO2004042059-A1.

21-MAY-2004.

10-NOV-2003; 2003WO-AU001487.

(UYQU) UNIV QUEENSLAND.

08-NOV-2002; 2002US-0425163P.

Frazer IH;

WPI; 2004-411519/38. P-PSDB; AD026715.

Constructing synthetic polynucleotide for modulating the quality of a selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide.

Example 1; SEQ ID NO 107; 86pp; English

the synonymous codon is selected on the basis that it exhibits a different phenotypic preference than the first codon in a comparison of phenotypic preference than the first codon in a comparison of phenotypic preference than the first codon in a comparison of phenotypic preferences in test organisms or parts, where the test organism are selected from organisms of the same species as the organism codon loss and (b) replacing the first codon with the synonymous codon to construct the synthetic polymucleotide. Also described: (1) a method for determining the phenotypic preference of a first codon in an organism of interest or its parts; (2) a synthetic polymucleotide constructed from the method above; (3) an organism or interest or part containing a synthetic polymucleotide constructed from the method above; (4) an organism or interest or part containing a synthetic construct that comparises a regulatory polymucleotide operably linked to a tandem repeat or a first codon fused in frame with a reporter polymucleotide operably linked to a tandem repeat of a first codon fused in frame with a reporter polymucleotide that comparison a reporter protein, which produces, or is predicted to produce a callected phenotype or a phenotype of the same class as the selected construction of a method of modulating the quality of a callected phenotype that is displayed by an organism of interest or part encodes the polypeptide; (6) a method of enhancing the quality of a callected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polymucleotide that encodes the polypeptide; and (7) a method of reducing the quality of a callected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polymucleotide that and that results from the expression of a parent polymucleotide that and that results from the expression of a parent polymucleotide from the expression of a parent polymorphic organism of interest or part and that re quality than that conferred by a parent polynucleotide that encodes the same polyneptide. It is useful for modulating the quality of a selected phenotype displayed by an organism or part. The present sequence encodes a synthetic leader sequence, which is used in an example from the present The present invention describes a method for constructing a synthetic polynuclectide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynuclectide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the parent polynuclectide for replacement with a synonymous codon, where a selected phenotype to an organism of interest or part in a different

Gaps 6 0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.46+02; tive 0; Mismatches 1; Indels Seguence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other; 15; Conservative Best_Local Similarity Matches 15; Conserv Query Match

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230 GTGGTGGTGGTGGCGG 245 greereereeree 2 17 ð

AD026658 standard; DNA; 18 BP. AD026658;

RESULT

(first entry) 12-AUG-2004

Synthetic leader sequence encoding DNA SEQ ID NO:51.

phenotype; phenotypic preference; phenotype modulation; leader; ds.

Synthetic.

WO2004042059-A1.

21-MAY-2004.

10-NOV-2003; 2003WO-AU001487

08-NOV-2002; 2002US-0425163P.

(UYQU) UNIV QUEENSLAND

Frazer IH;

WPI; 2004-411519/38

synthetic polynucleotide for modulating the quality of a P-PSDB; ADO26659 Constructing

selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide.

Example 1; SEQ ID NO 51; 86pp; English.

The present invention describes a method for constructing a synthetic polymucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest in a different gality than that conferred by a parent polymucleotide that encodes the gality than that conferred by a parent polymucleotide. The method comprises: (3) selecting a first codon of the parent polymuclacetide. The method comprises: (3) selecting a first codon of the parent polymuclacetide for replacement with a synonymous codon of the parent polymuclacetide for method comprises: (4) selected on the basis that it exhibits a different phenotypic preference than the first codon in a comparison of phenotypic preference than the first codon in a comparison of conginism are selected from organisms of the same species as the organism of interest and organisms that are related to the Organisms of interest of interest and organisms that are related to the Organism of interest of interest or its parts; (2) a synthetic polymucleotide constructed from the method above; (3) an organism or interest or part containing a synthetic construct that comparises a regulatory polymucleotide operatory polymucle

Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;

. 0.8%; Score 14.4; DB 1; Length 18; 33.8%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels 93.8%; 15; Conservative Query Match Best Local Similarity Matches

GIGGIGGIGGIGGIGG 3 18

230 GTGGTGGTGGTGGCGG 245

Š g RESULT 759

ADO26720 standard; DNA; 18

AD026720; 数記録記録

12-AUG-2004 (first entry)

Frazer IH;

Synthetic leader sequence encoding DNA SEQ ID NO:113

phenotype; phenotypic preference; phenotype modulation; leader; ds.

Synthetic

WO2004042059-A1

21-MAY-2004

10-NOV-2003; 2003WO-AU001487

08-NOV-2002; 2002US-0425163P.

(UYQU) UNIV QUEENSLAND

WPI; 2004-411519/38. P-PSDB; ADO26721 Constructing synthetic polynucleotide for modulating the quality of a selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide.

Example 1; SEQ ID NO 113; 86pp; English.

different phenotypic preference than the instruction and comparison of phenotypic preference than the first codon in a comparison of phenotypic preferences in test organisms of the same species as the organism of interest and organisms that are related to the organisms of interest; and (b) replacing the first codon with the synonymous codon to construct the synthetic polynuclectide. Also described: (1) a method for determining the phenotypic preference of a first codon in an organism of interest or its parts; (2) a synthetic polynuclectide constructed from the method above; (3) an organism or interest or part containing a synthetic polynuclectide construct that synthetic polynuclectide construct that comprises a regulatory polynuclectide operably linked to a tandem repeat comprises a regulatory polynuclectide operably linked to a tandem repeat comprises a regulatory polynuclectide operably linked to a tandem repeat comprises a regulatory polynuclectide operably linked to a tandem repeat comprises a regulatory polynuclectide operably linked to a tandem repeat comprises a reporter protein, which produces, or is predicted to produce a selected phenotype or a phenotype of the same class as the selected phenotype or a phenotype of the same class as the selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynuclectide that encodes the polypeptide; (6) a method of reducing the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polynuclectide that encodes the polypeptide; and (7) a method of reducing the quality of a selected phenotype to an organism of a parent polynuclectide that encodes the polypeptide. The method is useful for constructing a selected phenotype to an organism of interest or part and that results from the expression of a parent polynuclectide that the conferred by a parent polynuclectide that the conferred by a parent polynuclectide that the conferre phenotype displayed by an organism or part. The present sequence encodes a synthetic leader sequence, which is used in an example from the present polynucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the parent polynucleotide for replacement with a synonymous codon, where the synonymous codon is selected on the basis that it exhibits a The present invention describes a method for constructing a synthetic

Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;

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Ouery Match 0.8%; Score 14.4; DB 1; Length 18; Best Local Similarity 93.8%; Pred. No. 7.4e+02;
                                           1; Indels
                                           0; Mismatches
                                           15; Conservative
                                         Matches
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AAV13329 standard; DNA; 19 BP.

RESULT 761
AAV13329
ID AAV133
XX
AC AAV133

; 0

Gaps

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AAV13329

This 3'-PCR primer is used in a novel method for identification of allele types (in this case human leukocyte antigen (HLA) class II gene alleles) of a known polymorphic genetic locus in a sample. The allele type is identified by first combining the sample with a sequencing reaction mixture containing a polymerase, nucleoside feed stocks, one type of chain terminating nucleoside and a sequencing primer under conditions suitable for template dependent primer extension to form a number of oligonucleotide fragments of differing lengths, which are then evaluated on a denaturing gel. This determines the position of the type of base corresponding to the chain terminating bases in the primer. However, this method differs from standard sequencing procedures, instead of performing and evaluating four concurrent reactions, the sample is concurrently combined with at most three sequencing reaction mixtures containing different types of chain terminating nucleosides. The method can be used for the evaluation of polymorphic sites, and for determining the allelic type of a polymorphic sites, and for determining the allelic type of a polymorphic sites, and for determining the allelic Identification of allele type of a known polymorphic genetic locus - used particularly for human leukocyte antigen allele determination. Gaps polymorphic, Human leukocyte antigen; HLA; DNA sequencing; PCR; polymerase chain reaction; allele; ss. ·. 0.8%; Score 14.4; DB 1; Length 19; 33.8%; Pred. No. 7.7e+02; ive 0; Mismatches 1; Indels 3'-primer for HLA DR2 (15 and 16) allele amplification. Sequence 19 BP; 2 A; 7 C; 8 G; 2 T; 0 U; 0 Other; determining the HLA allele present in a sample Green RJ; Leushner J, Example 1; Page 17; 75pp; English. 1590 CCGCGTGGTGGACACC 1605 BP 230 GTGGTGGTGGTGGCGG 245 96WO-US020202. 1 Greeregreereg 16 95US-00577858. (VISI-) VISIBLE GENETICS INC 93.8%; 17 CCGCGCGGTGGACACC 2 AAT74921 standard; DNA; 19 (first entry) Best Local Similarity 93.8 Matches 15; Conservative Dunn JM, WPI; 1997-351085/32. WO9723650-A2 19-DEC-1996; 22-DEC-1995; Stevens JK, 07-JAN-1998 03-JUL-1997 AAT74921; Query Match RESULT 760 AAT74921, 셤 ð

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Tue Nov

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The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or call-cycle dependent kinases CDK1, PCNA, and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA86415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in ribozyme is resistant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel decorin binding proteins, DBP A and B useful as vaccines for protecting humans against Lyme disease and as immunogens for production of antibodies used in passive immunotherapy, or as diagnostic reagents.
                                                                                                                                                                                                    New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Decorin binding protein; DbpB; DbpB; adhesin; infection; Lyme disease; spirochete infection; vaccine; passive immunotherapy; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents a primer which was used to isolate {
m DN}_2 encoding a decorin binding protein ({
m Dbp}). The specification describes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PCR primer used to isolate DNA encoding a decorin binding protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Roberts W, Lathigra R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.4; DB 1;
93.8%; Pred. No. 7.7e+02;
tive 0; Mismatches 1;
                                                                                                                      Robbins JM;
                                                                                                                                                                                                                                                                                        Disclosure; Page 51; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure, Page 86; 93pp; English
                                                                                                                        Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              996 CCTGCTCATCAACGAG 1011
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99WO-US028772
                                      98US-0110954P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.8
Best Local Similarity 93.8
Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Borrelia burgdorferi
                                                                                                                      Tritz R, Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-317936/27.
                                                                               (IMMI-) IMMISOL INC
                                                                                                                                                                 WPI; 2000-412314/35.
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06-DEC-1999;
                                      04-DEC-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA14782;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Classifying patients with inflammatory disease, specifically asthma -according to polymorphisms in 5-lipoxygenase gene regulatory region, e.g. to identify candidates for lipoxygenase inhibitor treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence was used in the development of a novel method for classifying patients suffering from an inflammatory disease. The method comprises identifying in DNA from at least 1 patient a sequence polymorphism, as compared with the normal 5-lipoxygenase (5-LOX) gene (AAT88431), in a 5-LOX regulatory gene sequence. The method can be applied to subjects with asthma, ulcerative colitis, bronchitis, sinusitis, psoriasis, allergic and non-allergic rhinkis, lupus or rheumatoid arthritis. Specifically it can be used to diagnose asthma or susceptibility to disease, identify treatments suitable for individual patients or assess the likely success of treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                Inflammatory disease; polymorphism; 5-lipoxygenase; asthma; ulcerative colitis; bronchitis; sinusitis; psoriasis; rhinitis; arthritis; diagnosis; treatment; PCR primer; ss.
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                                                        Exon 11 for human 5-lipoxygenase gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      (BGHM ) BRIGHAM & WOMENS HOSPITAL
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97US-00846020.
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                     (first entry)
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Best Local Similarity 93.0.
Thes 15; Conservative
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                                                              Sense primer
                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                 WO9742347-A2
                                                                                                                                                                                                                                                                                                                                 29-APR-1997;
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                     14-MAY-1998
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Mammalia

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Gaps

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Length 19; 1; Indels

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DbpA and DbpB. DbpA and DbpB are adhesins, and are immunogenic. DbpA is a target for antibody-mediated killing of B. burgdorferi during the early stages of infection. The polypeptides are useful for producing antibodies to diagnose Lyme disease (spirochete infections), or for producing vaccines for prophylaxis and/or treatment of such infections. The antibodies may be useful in passive inmuchterapy, as diagnostic reagents and as reagents in other processes such as affinity chromatography
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Phosphorothioate; activator; oligonucleotide synthesis; phosphoramidite;
                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Preparation of nucleoside phosphoramidites and oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes nucleoside phosphoramidites and
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                                                                                                                                                                               Length 19;
                                                                                                                                                                                                                 1; Indels
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/note= "phosphorothioate linkages"
                                                                                                                                            Seguence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                             0.8%; Score 14.4; DB 1;
93.8%; Pred. No. 7.7e+02;
iive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Phosphorothioate 19-mer oligonucleotide #6.
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98US-00177953
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            phosphitylating reagent; ss
                                                                                                                                                                                                                                                                                                                                                                               AAZ57154 standard; DNA; 19
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                                                                                                                                                                                                                                                    910 GTGAAACTGTTCCTGT
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                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-097311/08.
                                                                                                                                                                                              Local Similarity
les 15; Conserv
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ57154;
                                                                                                                                                                             Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Modulating osteoblast proliferation or differentiation for treating bone diseases, e.g. osteoporosis, bone tumor, comprises administering an estrogen related receptor (ERR) alpha agonist, antagonist, antibody or
                                                                                                                                                                                                                                                                                                                                                                                                                                           Oestrogen related receptor alpha; ERRalpha; osteoblast proliferation; osteoblast differentiation; bone loss; osteoporosis; osteoarthritis; Paget's disease; periodontal disease; osteolytic bone tumour; osteochondrodysplasia; osteogenesis imperfecta; osteomalacia; sclerosing bone dysplasia; fibrodysplasia ossificans progressiva; osteoblastic bone metastasis; prostate cancer; osteosarcoma; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      osteochondrodysplasias, osteogenesis imperfecta, sclerosing bone
dysplasias and osteomalacia. The method may also be used for treating
fibrodysplasia ossificans progressiva, or osteoblastic bone metastases,
                                                                                                                              Gaps
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                                                                                          Length 19;
                                                                                        Score 14.4; DB 1; Length 1
Pred. No. 7.7e+02;
0; Mismatches 1; Indels
                   invention
                                                       G; 7 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer for osteoblast-associated marker OPN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                such as prostate cancer and osteosarcomas
phosphorothioate 19-mer oligonucleotide, described in an example from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 30; 73pp; English.
                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                   230 GTGGTGGTGGCGG 245
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                                                       Sequence 19 BP; 0 A; 0 C; 12
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                                                                                                             93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AUBI/) AUBIN J E. (BONN/) BONNELYE E.
                                                                                                               Similarity
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                                                                                              Query Match
                                                                                                                 Local
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [1] which claeves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule [II] comprising a promoter operably linked to a nucleic acid segment encoding [1]. [1] can have antipsoriatic, antisickling, chratchel and cytostatic, antiseborrheic, antidiabetic, antisickling, chratchel and cytostatic, antiseborrheic, antidiabetic, antisickling, chratchel and virucide activities, and cleaves RNA encoding Cytokine involved in inflammation. [1] can be used in gene therapy. [1] and [II] are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell cartinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAHS7577 to AAHG2099 represent sequences used in the care and invention
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                                                                                                                                                                                                                                                                                                                                                                                                         Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratoslytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                     Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:344.
                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
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  0.8%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 7.7e+02;
                                            1; Indels
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                                                                                         388
                                                                                                                                                                                                                                         AAH57920 standard; DNA; 19 BP.
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                                                                                       373 CAGGCTTCAGCCACGT
Query Match
Best Local Similarity 93.8'
Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-300427/31.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200130362-A2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                            RNA interference, vasotropic; nootropic; antiparkinsonian; neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide; anti-HIV; immunosuppressive; antionflammatory; antionic; gene therapy; modulation; inhibition; restenosis; central nervous system lesion; Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy; dementia; amyotrophic lateral sclerosis; cancer; polycystic kidney disease; inflammatory disease; allergic disease; viral infection; HIV; autoimmune disease; transplant rejection; ribozyme; human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;
                                                                                                                                                                                                                                                                                                                                                                                             short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        that downregulates expression of a nuclear factor kappa B (NF-kappaB) gene by RNA interference. Also described: (1) kits for in vitro or in vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3) vectors that express BiNA. The siNAs have vasotropic, nootropic, antiparkinsonian, neuroprotective, cytostatic, antiinflammatory, antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and nephrotropic activities, and can be used in gene therapy, and for the modulation (inhibition) of expression or activity of NF-kappaB by RNA interference (siNA target mRNA, RNA splice variants, post-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a short interfering nucleic acid (siNA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New short interfering nucleic acid downregulates expression of the NF-
                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    kappaB gene useful e.g. for treatment and diagnosis of cancer and
                                                                                      ö
                                                  Length 19;
                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                           Human REL-A short interfering nucleic acid SEQ ID NO:31.
               Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
                                                0.8%; Score 14.4; DB 1; 93.8%; Pred. No. 7.7e+02;
                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 3; Page 127; 149pp; English.
                                                                                                                        996 CCTGCTCATCAACGAG 1011
                                                                                                                                                                                                                                                    BP.
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06-JUN-2002; 2002US-0386782P.
29-AUG-2002; 2002US-0406784P.
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2002US-0409293P
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                                                                                                                                                                                                                                                  ADA25683 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Beigelman L;
                                                                                                                                                                                                                                                                                                                       (first entry)
                                                               Local Similarity 93.8
Les 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-689788/65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nuclear factor; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J,
                                                                                                                                                                                                                                                                                                                       20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-AUG-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                        ADA25683;
                                                  Query Match
                                                                                                                                                                                                                RESULT 767
                                                                                    Matches
                                                                                                                                                                                                                                   ADA25683
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Page 387

transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA sequences can be used to modulate expression of NF-kappaB genes, in calls, tissue explants or organisms, e.g. by ex vivo gene therapy, in grafts and transplants for treating restenosis and central nervous system lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases, cancers, other proliferative diseases (restenosis) or for treating many disease), inflammatory and/or allergic diseases, viral infections (including HIV), autoimmune diseases and transplant rejection, and also for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene represents human v-rel reticuloendee polymorphisms). The present sequence represents human v-rel reticuloendee polymorphisms. The present sequence (REL-A) sing, which is used in the exemplification of the present in Necelia. Sequence 19 BP; 4 A; 6 C; 3 G; 0 T; 6 U; 0 Other; 255555555555555555555555

0.8%; Score 14.4; DB 1; Length 19; 68.8%; Pred. No. 7.7e+02; ative 4; Mismatches 1; Indels 538 CCCATCTTTGACAAGC 553 11; Conservative Query Match Best Local Similarity Matches

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Gaps ö

> Human REL-A short interfering nucleic acid SEQ ID NO:167. ADA26032 standard; RNA; 19 BP 20-NOV-2003 (first entry) ADA26032;

RNA interference; vasotropic; nootropic; antiparkinsonian; neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide; neuroprotective; cytostatic; antiinflammatory; antiallergic; gene therapy; modulation; inhibition; restenosis; central nervous system lesion; Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy; dementia; amyotrophic lateral sclerosis; cancer; polycystic kidney disease; inflammatory disease; allergic disease; viral infection; HIV; autoimmune disease; transplant rejection; ribozyme; human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A; short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB; nuclear factor; ss

WO2003070970-A2 Homo sapiens. Synthetic

28-AUG-2003.

2002US-0358580P. 2002US-0363124P. 2002US-0386782P. 20-FEB-2003; 2003WO-US004951. 2002US-0406784P 20-FEB-2002; 29-AUG-2002; 11-MAR-2002; 06-JUN-2002;

2002US-0408378P.

05-SEP-2002;

09-SEP-2002

2002US-0409293P

(RIBO-) RIBOZYME PHARM INC.

15-JAN-2003; 2003US-0440129P.

Beigelman L; WPI; 2003-689788/65. Mcswiggen J,

The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of a nuclear factor kappa B (NF-kappaB) can by RNA interference. Also described: (1) Kits for in vitro or in vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3) vectors that express siNA. The siNAs have vasotropic, nootropic, antiparkinsonian, neuroprotective, cytostatic, antiinflammatory, antialergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and nephrotropic activities, and can be used in gene therapy, and for the modulation (inhibition) of expression or activity of NF-kappaB by RNA interference (siNA target mRNA, RNA splice variants, post-transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA sequences can be used to modulate expression of NF-kappaB genes, in grafts and transplants for treating restenosis and central nervous system cars, other proliferative diseases (restenosis and central nervous system cancers, other proliferative diseases (restenosis and polycystic kidney disease), inflammatory and/or allergic diseases, viral infections (including HIV), autoimmune diseases (restenosis and polycystic kidney disease), inflammatory and/or allergic diseases, viral infections of for drug screening; disagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene represents human v-rel reticuloendotheliosis viral concogene homologue A (REL-A) sinA, which is used in the exemplification of the present invention. REL-A is a nuclear factor of the kappa light polypeptide gene ö short interfering nucleic acid; siNA; protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic; New short interfering nucleic acid downregulates expression of the NF-kappaB gene useful e.g. for treatment and diagnosis of cancer and Gaps Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID No 99. . 0.8%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 7.7e+02; tive 0; Mismatches 1; Indels Sequence 19 BP; 6 A; 3 C; 6 G; 0 T; 4 U; 0 Other; Example 3; Page 127; 149pp; English. 2002US-0406784P. 2002US-0408378P. 2002US-0409293P. 2003US-0440129P. ADF71314 standard; RNA; 19 BP. 538 CCCATCTTTGACAAGC 553 11-FEB-2003; 2003WO-US004347 2002US-0358580P 2002US-0363124P. 2002US-0386782P. 19 cccarcrrrdacaarc 4 12-FEB-2004 (first entry) 15; Conservative enhancer in B-cells. Similarity WO2003070886-A2. 29-AUG-2002; 05-SEP-2002; 09-SEP-2002; 15-JAN-2003; Homo sapiens. inflammation. 11-MAR-2002; 06-JUN-2002; 20-FEB-2002; 28-AUG-2003. cancer; ss ADF71314; Query Match Best Local S RESULT 769 ADF71314/c Matches g ò

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WPI; 2003-075569/07.
                     WPI; 2003-697606/66
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200284286-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                               The invention relates to a novel short interfering nucleic acid (siNA) that downregulates expression of a protein tyrosine phosphatase type IV (FRL3) gene by RNA interference. The invention further relates to modulating the expression of PRL3 genes in cells, tissue explants or organisms by the introduction of an siNA, kits for in vitro or in vivo delivery of an siNA, conjugates and/or complexes of siNA, and vectors that express siNA. The novel siNA so of the invention have cytostatic activity. SiNA's are used to modulate expression of PRL3 genes, in cells, tissue explants or organisms, e.g. for treating cancer but also for drug soreening; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). This polymucleotide sequence represents a short interfering nucleic acid for downregulating the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     short interfering nucleic acid, siNA; protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                       New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of a protein tyrosine phosphatase type IVa gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 4 A; 6 C; 2 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                              Example 3; SEQ ID NO 99; 131pp; English.
                                                               Usman N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen J, Beigelman L, Usman N;
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2002US-0406784P.
2002US-0408378P.
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2002US-0363124P.
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                     (RIBO-) RIBOZYME PHARM INC
                                                               Beigelman L,
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Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                      WPI; 2003-697606/66
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29-AUG-2002;
05-SEP-2002;
                                                             Mcswiggen J,
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11-MAR-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        invention.
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that downregulates expression of a protein tyrosine phospharase type IV PRL3) gene by RNA interference. The invention further relates to modulating the expression of PRL3 genes in cells, tissue explants or organisms by the introduction of an isNA; kits for in vitro or in vivo delivery of an siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The novel siNA's of the invention have cytostatic activity. SiNA's are used to modulate expression of PRL3 genes, in cells, tissue explants or organisms, e.g. for treating cancer but also for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence represents a short interfering nucleic acid for downregulating the expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Screening method for agonists or antagonists to alter binding properties of novel G protein-coupled receptor protein in controlling cholesterol metabolism, used to diagnose and treat inflammatory diseases or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Screening, G protein-coupled receptor; cholesterol metabolism; ss; inflammatory disease; transplantation rejection; immune insufficiency; infection; PCR; primer; TNF alpha.
                                                                                                                                                                                                                                                  The invention relates to a novel short interfering nucleic acid (siNA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer , downregulates expression of a protein tyrosine
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11.2%; Pred. No. 7.7e+02;
ve 2; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 19 BP; 7 A; 2 C; 6 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                    Example 3; SEQ ID NO 25; 131pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВЪ.
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14-JUN-2001; 2001JP-00180562.
16-JUL-2001; 2001JP-00214922.
27-DEC-2001; 2001JP-00397767.
22-PEB-2002; 2002JP-0045728.
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                                                                                  phosphatase type IVa gene.
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ses 13; Conservative
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ADO14953;
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                                              The invention comprises a method for screening for compounds that are receptor protein. The method of the invention is useful for screening agonists or antagonists to alter binding properties of novel G protein-coupled receptor proteins in controlling cholesterol metabolism. The method of the invention is useful in the diagnosis and treatment of inflammatory diseases, excessive immune reaction after transplantation, immune insufficiency and infections. The present DNA sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytostatic; vasotropic; nephrotropic; cerebroprotective; treating leukaemia; solid tumors; restenosis; polycystic kidney disease; bronchiolitis; glomerulonephritis; stroke; RNA interference; short interference; short interfering RNA; sink, double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; human; platelet derived growth factor receptor; PDGFr; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New short interfering nucleic acid, useful e.g. for treatment and diagnosis of tumors, downregulates expression of the platelet-derived
                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                       0.8%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 7.7e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PDGFr-targeted siNA upper strand SEQ ID NO:73.
                                                                                                                                                                               Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 3; SEQ ID NO 73; 148pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen J, Beigelman L, Chowrira B;
                        Disclosure; Page 174; 186pp; Japanese.
                                                                                                                                                                                                                                                              691
                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             growth factor receptor gene
                                                                                                                                                                                                                                                                                                                                                      ADO14642 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                            676 AAGCTCACAGACAACC
                                                                                                                                                                                                                                                                                     17 AAGCTCACGGACAACC
                                                                                                                                                                                                                                    Conservative
                                                                                                                                                        a TNF alpha PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-731605/69.
                                                                                                                                                                                                                    Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAR-2002;
06-JUN-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                         01-JUL-2004
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05-SEP-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-FEB-2002;
                                                                                                                                                                                                                                   15;
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                                                                                                                                                                                                                                                                                                                                                                               AD014642;
                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                           RESULT 772
                                                                                                                                                                                                                                   Matches
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CC The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human platelet-derived growth factor ceresptor (PDGFT) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA, doublect stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA, doublect stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA). The siNAs can be unmodified or chemically modified, can contain covertor or enzymatically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siRNA; conjugates and/or complexes of siRNA; and vectors that express siNA, The siNAs are used to modulate expression of the PDGFT gene in cells, tissue explants or coganisms (e.g., by ex vivo gene therapy), or in grafts and transplants or since the treatment of a variety of conditions. They may be used for treating leukaemia and solid tumours, restenosis, polycystic kidney disease, bronchiolitis, glowmenlonephritis and stroke. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification of and vabladation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single mucleotide polymorphisms).

The present sequence represents the upper strand of a human PDGFrest expression the present sequence represents the upper strand of a human poger.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic; vasotropic; nephrotropic; cerebroprotective; treating leukaemia; solid tumors; restenosis; polycystic kidney disease; bronchiolitis; glomerulonephritis; stroke; RNA interference; shorthinterfering RNA; sinka; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; micro-RNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene amapping; human; pularelet derived growth factor receptor; PDGFr; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human PDGFr-targeted siNA lower strand SEQ ID NO:384.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 2 A; 5 C; 8 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  270 ACGIGCIGCICCIGGG
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003072704-A2.
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05-SEP-2002;
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06-JUN-2002;
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treating leukamia and solid tumours, restenosis, polycystic kidney disease, bronchiolitis, glomerulonephritis and stroke. The siMs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human PDGFr targeted double-stranded siNA, which is identical to the PDGFr transcript
                                                                                                                                                                                                                                                                                                                                                                                                               decorribonuclectides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siRNA; conjugates and/or complexes of siRNA; and vectors that express siNA. The siNAs are used to modulate expression of the PDGFr gene in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for
                                                                                                                                                                                                                                                                  receptor (PDGFr) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA, doublestranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antidiabetic; anorectic; anabolic; eating-disorder; immunosuppressive;
GPCR; PCR; primer; ss; tumour necrosis factor alpha; TNF alpha.
                                                                                                    New short interfering nucleic acid, useful e.g. for treatment and diagnosis of tumors, downregulates expression of the platelet-derived
                                                                                                                                                                                                                             The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human platelet-derived growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGR5; GLP-1; glucagon-like peptide-1; G protein coupled receptor;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             i; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 4 A; 8 C; 5 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                   Example 3; SEQ ID NO 384; 148pp; English.
                   Chowrira B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INF-alpha mRNA quantifying primer.
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                                                                                                                                              growth factor receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 Acerececrecress 3
                   Mcswiggen J, Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-AUG-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         target sequence
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The invention relates to screening agonist or antagonist of receptor protein or glucagon-like peptide-1 (GLP-1) secretagogue or GLP-1 secretion inhibitor, by using 6 protein coupled receptor 7GR5. The 7GR5 is derived from human, mouse, rat, cow, rabbit or guinea pig. The compound is an inhibitor of cytokine production. The compound is a GLP-1 secretion promoter. The agonist of GPCR secretion promoter, pancreas regenerating agent, pancreatic beta-differentiation or growth promoter. The agonist of GPCR is useful for producing a GLP-1 secretion promoter, prophylactic and/or therapeutic agent of diabetes, insulin hyposecretion, pancreatic exhaustion, obesity, anorexia or regeneration of pancreas. The antagonist of GPCR having is useful for producing GLP-1 secretion inhibitor and prophylactic and/or therapeutic agent of hypoglycaemia. TGR containing the compound is useful as prophylactic or therapeutic agent of pathological conditions associated with regulation of physiological conditions associated with regulation of physiological immunosuppressive agent for suppressing immune reaction after cardiac facilure, myocardial infarction, acute renal failure, angina, arrhythmia, bronchia asthma, chronic obstructive pulmonary disease, atterioaclerosis, rheumatoid arthritis, diabetes, gastric ulcer, ulcerative colitis, allergy, osteoarthritis, laubus erythematosus, infectious disease or after transplant. Sequences ADP67047-ADP67061 crepresent PCR primers and probes specific for interleukin (IL)-1 alpha, used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic; probe.
                                                                                                                        Screening agonist or antagonist of receptor protein or glucagon like peptide-1 secretion inhibitor, by using G protein coupled receptor and compound capable of altering binding property of cholesterol metabolism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                       Itoh F;
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                                       Uejima H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rat matrix metalloproteinase 11 (MMP11) DNA probe.
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                                         Komatsu H,
                                                                                                                                                                                                                               Example 11; SEQ ID NO 34; 274pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IL-1 beta, IL-6, IL-8 and tumour necr
respective genes mRNA quantification.
                                         Kawamata Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADP27088 standard; DNA; 19 BP.
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(TAKE ) TAKEDA CHEM IND LTD
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                                         Fujii R,
                                                                              WPI; 2004-440561/41.
                                                                                                                                                                                        related substance.
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                                         Hinuma S,
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28-MAR-2003; 2003JP-00092033. 13-JUN-2003; 2003JP-00168817.

2002JP-00328581.

L2-NOV-2002;

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BP.
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AAQ48094 standard; DNA; 20 BP.
                                                                                                                                                                                        224 ATGAGAGTGGTGG 239
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                                                                                                                                                                                                                          16 Argagagragragrag
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                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                      Query Match
Best Local Similarity 93.8'
Matches 15; Conservative
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Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                      07-OCT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
10-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-MAY-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ48094;
                                                                                                                                                                                                                                                                                                                                                                AAQ42491;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                    RESULT 777
                                                                                                                                                                                                                                                                                                          AAQ42491/
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0 0 0 0 X 0
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                                                                                                                                                                                                                      The invention relates to a compound targeted to a nucleic acid molecule encoding a matrix metalloproteinsse 11 (MMP11) polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl agar moiety, or at least one modified nucleobase comprising a 5-methylytrosine. The antisense compounds are useful for modulating the expression of the MMP11 polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence repersents a probe which hybridises to DNA encoding the rat MMP11 polypeptide of the invention.
                                                                                                              New oligonucleotide compound that inhibits expression of matrix metalloproteinase 11, useful for preparing a composition for treating hyperproliferative disorder, e.g., cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligo-nucleotide for detecting microbe with high sensitivity and selectivity - more specifically for targetting a nucleotide sequence coding a thermostable direct haemolysin-related haemolysin gene type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vibrio parahaemolyticus; thermostable direct; haemolysin-related; haemolysin gene; type 2; type 1; V.p; polymerase chain reaction; PCR; primer; detection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequences give in AAQ30925-32 are oligonucleotides which target sequences in Vibrio parahaemolyticus (V,p) which encode thermostable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.4; DB 1; Length 19; 33.8%; Pred. No. 7.7e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                        Example 13; SEQ ID NO 14; 76pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 2; Page 2; 24pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1721 GCCATGTTCACCTGCC 1736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91JP-00059820.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ30930 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 GCCATGGTCACCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 93.8
Matches 15; Conservative
(ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SHMA ) SHIMADZU CORP.
                                      Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1992-394404/48.
                                                                          WPI; 2004-440341/41.
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                                    Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ30930;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Labelled primers-a and -b (AAQ42490 and AAQ42491, respectively) were used to amplify sample DNA from Vibrio parahaemolyticus WP1. Primer-a is specific to the tdh gene. A third oligonucleotide (AAQ42492) was added to the denatured PCR product, allowed to anneal and the annealed product was added to a solid substrate. The target sequence was detected by measuring absorbance at 492nm, without the need for electrophoresis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Detection of nucleic acid - involves amplifying using DNA synthetase and labelled oligo:nucleotide, modifying etc. avoiding electrophoresis.
direct hemolysin-related hemolysin gene type 1 and type 2. These sequences can also be used to detect V.p by acting as polymerase chain reaction primers. These oligos allow highly sensitive detection of V.p
                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                  1; Indels
                                                                                                                                                                                   0.8%; Score 14.4; DB 1; Length: 93.8%; Pred. No. 8.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer-b to amplify Vibrio parahaemolyticus WP1 DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                              Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
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(first entry)
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Prepn. of DNA
then bonding
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                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                   AAQ46096;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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                                                                                                                                                                                                                                        AAQ46096/
ID AAO4
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                                                                                                                                                                                                             Oligo:nucleotide(s) specific for Vibrio parahaemolyticus, E.coli or S.aureus - used as primers or probes partic. for detecting food poisoning and in food inspection.
                                                                                                                                                                                                                                                                Oligonucleotides AAQ48091-Q48094 (designated primers c, d, e and f, respectively) are complementary to a target sequence from the tdh gene from V.parahaemolyticus. They are used as PCR primers in the following pairs: c/d, e/f, e/f to specifically amplify fragments of 373, 199 or 251bp, respectively, from the tdh gene. (Updated on 25-MAR-2003 to
                                                                                                                                                                    Shirasaki Y;
                                                                                                                                                                                                                                                                                                                                                                 Gaps
                 Thermostable direct haemolysin gene; tdh; bacterial detection; nucleic acid amplification; polymerase chain reaction; PCR;
                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide used for production of probe for tdh gene.
                                                                                                                                                                    Ozaki H, Nishimura N,
                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
Vibrio parahaemolyticus tdh gene PCR primer (f)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transglutaminase; ss.
                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                 Claim 2; Page 119; 122pp; English.
                                                                                                                                                                   Tada J, Fukushima S,
                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
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                                                                                                        92EP-00307606
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92JP-00066082
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                                                                                                                                                                                                                                                                                                                                                                 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Probe; enzyme labelling;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vibrio parahaemolyticus
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                                                                                                                                                  (SHMA ) SHIMADZU CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1993-277466/35.
                                                                                                                                                                                              WPI; 1993-265932/34
                                   food poisoning; ss.
                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                              correct PN field.)
                                                                                                       20-AUG-1992;
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                                                                                                                        18-FEB-1992;
24-MAR-1992;
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                                                                      EP556504-A2
                                                                                                                                                                            Yamagata K;
                                                    Synthetic.
                                                                                                                                                                   Ohashi T,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ46093;
                                                                                                                                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                   The DNA probe is prepared by introducing an amino group at the 5' terminus of DNA or a nucleotide, followed by using transglutaminase to bond a labelling substance to the obtained DNA having the introduced amino group. The enzymatic reaction using transglutamase is advantageous in time and cost since many chemical reaction stages associateed with e.g. radiolabelling of probes can be by-passed. The enzymatic reaction is mild, decrease of activity of the labelled compound can be minimised and producibility is increased
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              terminus of DNA or anucleotide, followed by using transglutaminase to bond a labelling substance to the obtained by using transglutaminase to bond a labelling substance to the obtained DNA having the introduced amino group. The enzymatic reaction using transglutamase is advantageous in time and cost since many chemical reaction stages associateed with e.g. radiolabelling of probes can be by-passed. The enzymatic reaction is mild, decrease of activity of the labelled compound can be minimised and producibility is increased. Two PCR primers (AAQ46095, AAQ46095) were used to amplify DNA samples prepared from vibrio Parahaemolyticus WPl
Prepn. of DNA probe - by introducing amino gp. at 5'-terminal of DNA, then bonding labelling substance to DNA using transglutaminase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of DNA probe - by introducing amino gp. at 5'-terminal of DNA, onding labelling substance to DNA using transglutaminase.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primer used for amplifying Vibrio parahaemolyticus tdh gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Probe; enzyme labelling; transglutaminase; ss.
                                                                                                           Disclosure, Page 3; 5pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 3; 5pp; Japanese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 ATGAGAGTGGTAGTGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ46096 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1993-277466/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
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Human; netrin; ATPase binding cassette transporter; ribosomal L3; augmenter of liver regeneration; hNET; hABC3; SEM L3; hALR; chromosome 16; exon trapping; axon; chicken; laminin domain; C. elegans; UNC-6; cystic fibrosis; ss.
                                                                                                                                                                                                                                                     PCR primers (AAT60438-43) were used in 5'RACE and 3'RACE amplifications of K562 cell cDNA in order to isolate full-length clones for the novel human intracellular tyrosine kinase TMR (AAT6043) and for its splice vairant TMR1-alpha (AAT60441). Primer A (AAT60442) is specific for TMR and was used to identify TMR1 sequences in 5'RACE products cloned into
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated human chromosome 16 genes - encode netrin, ATPase binding cassette transporter, ribosomal L3 sub-type or augmenter of liver regeneration.
                                                                                                                                                             Tnk1 intracellular tyrosine kinase and its splice variant - useful in gene therapy to inhibit cell transformation, stimulate haematopoietic
                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.4; DB 1; Length 20;
93.8%; Pred. No. 8.1e+02;
tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dackowski WR,
                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligo #2 used to isolate hALR cDNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Connors TD,
                                                                                                                                                                                                                          Example 1; Page 34; 69pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 72; Page 66; 98pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1022 TCAAGCTGGCTGACTT 1037
                                                                                                     Hoehn GT
                                                                                                                                                                                            cells etc. and for diagnosis.
            96WO-US016359.
                                          95US-0005286P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 TCAAGGTGGCTGACTT 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT85490 standard; cDNA; 20
                                                                     (UYJO ) UNIV JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                            15; Conservative
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                                                                                                  Small D,
                                                                                                                                  WPI; 1997-235882/21.
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                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
            11-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-JUN-1996;
                                          12-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9702346-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-NOV-1997
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                                                                                                  civin CI,
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                                                                                                                                                                                                                                                                                                                                     vector TA
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                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 783
AAT85490/c
                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The primers given in AAQ68497-500 are used in the detection of V. parahaemolyticus DNA. The primers given in AAQ68501-503 are used in the detection of V. cholerae DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Detection of nucleic acid - using polymerase chain reaction and solid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                          Vibrio parahaemolyticus; Vibrio cholerae; detection; amplification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tyrosine kinase; Inkl; signal transduction; cell transformation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cell proliferation; haematopoietic cell; bone marrow; cancer; gene therapy; diagnosis; polymerase chain reaction; PCR; primer; rapid amplification of cDNA ends; 5' RACE; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                          primer; polymerase chain reaction; PCR; ss.
                                                                                                                                                                                                              Vibrio parahaemolyticus DNA primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 3; Page 2; 9pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tyrosine kinase Tnkl primer A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      224 ATGAGAGTGGTGG 239
                                                                                                                   AAQ68498 standard; DNA; 20 BP
            224 ATGAGAGTGGTGG 239
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                                         Arcadagregragred 1
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Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                          (SHMA ) SHIMADZU CORP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      phase recognition.
                                                                                                                                                                                27-FEB-1995
                                                                                                                                                                                                                                                                                                                     JP06165698-A
                                                                                                                                                                                                                                                                                                                                                                               16-JUL-1993;
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                                          16
                                                                                                                                                 AAQ68498;
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Klinger KW

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Gaps

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used in the chimeric non-human animal of the invention. The chimeric non-human animal of the invention, preferably a mouse, contains a foreign chromosome(s) or chromosome fragment. The animal is produced by obtaining a hybrid cell by fusion of a cell containing the foreign chromosome with a cell having the ability to form microcalls. The microcalls are prepared, and fused with cells having differentiative pluripotency and containing the foreign chromosome. These cells are then introduced into an embryo, which is then implanted and brought to term. The foreign chromosome segment is at least implanted and brought to term. The foreign chromosome segment could also contain genes associated with human chromosome segment could also contain genes associated with human disease, such as the interleukin-2 gene, and the Huntington's disease contain genes associated with man animal is useful for efficient production of proteins, especially human animal is useful for efficient production of proteins, especially contains animal which
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT92758-T92817 represent amplification primers for human genes which are
The sequences given in AAT85489-90 are oligos which hybridise under stringent conditions to the cDNA encoding the human augmenter of liver regeneration protein (hALR). The hALR genomic sequence was isolated from human chromosome 16 by exon trapping, hALR cDNA encodes a 119 amino acid protein which is 84.8% identical and 94.1% similar to the rat ALR protein. The hALR gene is specifically isolated from the chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer; amplify; human gene; chimeric non-human animal; antibody; transgenic mouse; chromosome fragment; hybridoma production; microcell; Huntington's disease gene; pluripotent cell; interleukin-2 gene; myeloma cell; immunoglobulin; variable region; ss.
                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    animal containing foreign chromosome - for expression of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Primer #2 for immunoglobulin kappa variable region Vkappal-2.
                                                                                                                                                                                                     0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ishida I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oshimura M,
                                                                                                                                                                  Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 21; 142pp; Japanese.
                                                                                                                                                                                                                                         0;
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                                                                                                                                                                                                                                                                                  1657 CACACCCTCACAGGG 1672
                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
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                                                                                                                                                                                                 Query Match
Best Local Similarity 93.8
Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (KIRI ) KIRIN BEER KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1997-178822/16.
                                                                                                                              region 16p13.3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9707671-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-AUG-1996;
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                                                                                                                                                                                                                                                                                                                       20
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          8×666666666
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Genome (represented in AAX10269-X12937). These primers dund in the human genome (represented in AAX10269-X12937). These primers can be used in a method for determining polymorphic forms in an individual for use in e.g. of crensics, paternity testing or four phenotypic typing for diseases such as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Addrich syndrome, Fabry's disease, familial hypercholesterolemia, polycystic kidney disease, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary haemorrhagic telangiectesia, familial colonic polyposis, Bhlers-Danlos system, infection by pathogenic microorganisms, and characteristics such as longwitty, appearance (e.g. baldmess, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or prophylasis of endurance.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX09121-X10268 are allele-specific oligonucleotide primers used in the
             myeloma cells to produce hybridomas capable of expressing the foreign gene (e.g. to produce the antibody)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Polymorphism; biallelic; human; forensic; paternity testing; disease; detection; phenotypic typing; characteristic; infection; hereditary; autoimmune disease; cancer; inflammation; drug; therapy; medicament;
                                                                                                                                                  Gaps
material can be isolated and fused with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated nucleic acid segments from the human genome - used for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.
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0
                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                             Human biallelic polymorphic marker downstream primer #428.
                                                                                                                                                1; Indels
                                                                         Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;
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                                                                                                           0.8%; Score 14.4; DB 1;
13.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                   AAX10122 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          treatment; marker; primer; ss.
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                                                                                                                                                                                    CTGATGGGGAGAGTGA 371
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                                                                                                                           93.8%;
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express the foreign genetic
                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                               Best Local Similarity 93.8
Matches 15, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-286974/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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                                                                                                                                                                                    356
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                                                                                                                                                                                                                                                                                                                                                        AAX10122;
                                                                                                             Query Match
                                                                                                                                                                                                                                                                               RESULT 785
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RESULT 787
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human chromosome 16 genes encoding netrin, ATP binding cassette transporter, ribosomal L3 and augmenter of liver regeneration proteins - useful for, e.g. treatment of liver disease and cystic fibrosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, augmenter of liver regeneration, hALR; treatment; modulation; expression, antibody; identification; binding; substrate specificity; ligand; exon trap; damaged liver; treatment; PCR primer; amplify; ss.
                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3' RACE internal PCR primer used to clone the human ALR gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02; ve 0; Mismatches 1; Indels
                               0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; iive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 80; Page 69; 220pp; English.
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                                                                                                                                                                      680
                                                                                                                                                                                                                                                                                                                                                                             342/c
AAV16342 standard; DNA; 20 BP.
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96US-00762500.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                   665 AAGGCAAAAGCAAGCT
                                                                                                                                                                                                                20 AAGGCAAAAGCAAGAT
                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GENZ ) GENZYME CORP.
Query Match
Best Local Similarity
Trahes 15; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9748797-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Klinger KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Landes GM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV16342;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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AAV16342/C
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                                                                                                                                                                                                                                                                                                                                                                                                                           This primer is used for the PCR amplification of the human EP3-V and EP3-V Treepptor CDNA sequences. A replication or expression vector comprising CDNA sequences encoding EP-3V or EP3-3VI can be used to transform a host cell. The host cell is cultured and the polypeptides can be recovered from the culture medium. The polypeptides combine specifically with a prostaglandin PGE2 receptor and can be used as a preventive and treating agent for inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pluripotent cell; intrinsic gene; chimeric non-human animal; construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                         New human prostaglandin EP3 receptor(s) - useful for treatment and prevention of, e.g. inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·.
                                                                                                                Prostaglandin E2 receptor; EP3-V receptor; human; treatment; inflammation; EP3-VI; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Immunoglobulin kappa variable PCR primer Vk1-2 #2.
                                                                                       fluman EP3 receptor cDNA amplifying primer 1.
                                                                                                                                                                                                                                                                                                                                                                                                   Example; Page 7; 27pp; Japanese.
           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    347 AGATGGGGTCTGATGG 362
                                                                                                                                                                                                                                                    96JP-00291150
                                                                                                                                                                                                                                                                              96JP-00291150.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 AGATGGGGCCTGATGG 17
           AAV29622 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV52762 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 93.8
nes 15; Conservative
                                                                                                                                                                                                                                                                                                       (ONOY ) ONO PHARM CO LID.
                                                                                                                                                                                                                                                                                                                                  WPI; 1998-315474/28.
                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                 JP10113185-A.
                                                                                                                                                                                                                                                                              14-OCT-1996;
                                                                                                                                                                                                                                                    14-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
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                                                              19-AUG-1998
                                                                                                                                                                                                                           06-MAY-1998.
                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                     AAV29622;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV52762;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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AAV2962
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Gaps

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1657 CACACCCTCACAGGG 1672

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20 CACACTCCTCACAGG 5

93.8%;

15; Conservative

Matches

Local Similarity

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Protein containing PDZ domain, whose expression is enhanced by TNF stimulation - plays an important role in protein/protein interactions and is used for screening for proteins for use in treatment of cell proliferation disorders such as cancer.
                                                                                                                                                                                                                                                                                                                                     This sequence represents a primer use to amplify and isolate clones which encode new proteins containing PDZ domains whose expression in human umbilical vascular endothelial cells (HUVBC) are enhanced by stimulation with tumnour necrosis factor (TNF) alpha. The new protein is used to identify proteins which bind to it (particularly to the PDZ domains) and the genes encoding them, for use in the treatment of cell proliferation disorders such as cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein containing PDZ domain, whose expression is enhanced by TNF stimulation - plays an important role in protein/protein interactions and is used for screening for proteins for use in treatment of cell proliferation disorders such as cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Primer 1192-1161 for PDZ domain-containing protein gene clone 32-8-1/5R3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence represents a primer used to isolate the clone 32-8-1/5R3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PDZ domain; gene expression; human umbilical vascular endothelial HUVEC; stimulation; tumour necrosis factor; TNF; protein binding; cell; proliferation disorder; cancer; primer; amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      r match 0.8%; Score 14.4; DB 1; Length 20; Local Similarity 93.8%; Pred. No. 8.1e+02; les 15; Conservative 0; Mismatcher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
                       (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
                                                                                                                                                                                                                                                                                                 Example 2; Page 29; 240pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 2; Page 31; 240pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  880 GACTGTGGGAACATCA 895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98WO-JP003603
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98JP-00189944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 GACTGTGGGACCATCA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX29949 standard; DNA; 20
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                                                                        Miyata S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Miyata S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-167423/14.
                                                                                                                    WPI; 1999-167423/14
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                                                                        Funahashi S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9907846-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-AUG-1997;
19-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX29949;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                  containing foreign chromosomes or their fragments (preferably at least containing foreign chromosomes or their fragments (preferably at least cells containing the foreign chromosomes or fragments, then fusing these with pluripotent cells such as embryonic stem cells, embryonic cancer cells or their mutants. Also reproductive cells, embryonic cancer cells or their mutants. Also described are: (1) a method of obtaining hybridoma cells by fusing a cell with a high ability to produce hybridoma cells (such as mouse Ag cells) with a cell containing the foreign chromosomes or fragments (such as normal human diploid cells); (2) a method of utilising pluripotent cells to produce chimeric and transgenic non-human animals (especially mammals such as mice) which can express the foreign chromosomes or fragments cuch as mice) which can express the foreign chromosomes or fragments cells derived from the offspring production of monoclonal antibodies for inventions can be used for the production of monoclonal antibodies for medical use which are of human type and therefore not antipodies for humans type and therefore not antipodie or the champers. They can also be used in the production of chimeric and cransgenic animals which express use setul foreign proteins, or which can serve as models for the study of human diseases. AAV52755 to AAV5288 are
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                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a method of obtaining pluripotent cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                Pluripotent cells containing foreign chromosomes or fragments - and r
human chimeric animals constructed using them and expressing foreign
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
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                                                                                                                                                Ishida I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Primer 1192-1161 for PDZ domain-containing protein genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primers used in examples from the present invention
                                                                                                                                                   Oshimura M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                   genes such as human antibiotic genes.
                                                                                                                                                   Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 34; 217pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX29918 standard; DNA; 20 BP
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98JP-00189944.
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  98WO-JP000860
                                                 97JP-00062309
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                                                                                                                                                Yoshida H,
                                                                                                  BEER KK
                                                                                                                                                                                               WPI; 1998-480821/41
                                                                                                  (KIRI ) KIRIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                              28-FEB-1997;
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02-MAR-1998;
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RESULT 789 AAX29918/ AAX29918;

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RESULT 792

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which encodes a new protein containing PDZ domains whose expression in human umbilical vascular endothelial cells (HUVEC) is enhanced by stimulation with tumour necrosis factor (TNF) alpha. The new protein is used to identify proteins which bind to it (particularly to the PDZ domains) and the genes encoding them, for use in the treatment of cell proliferation disorders such as cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 density gene chip, specifically for making high-density micro-array of oligonucleotide probes. An oligonucleotide probe selecting process to oligonucleotide probes and coverage variable probes to provided to ensure identical cross melting temperature of probes is provided to ensure identical cross melting temperature of probes to the maximum limit, and this can make the cross control of gene chip relatively simple and raise the reliability of the gene chip detecting results. The proposes a specific probe selection method for detecting target sequence directly, detecting mutation in both specific and non-specific sites and a probe overall arrangement scheme. AAA79738 to AAA80201 represent oligonucleotide probe sequences which are used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a method which comprises making a high-
                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection; mutation; high-density gene chip; ss.
                                                                                                                                                                                                        ;
                                                                                                                                                                   0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.4; DB 1; Length 20;
33.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hepatitis B virus related oligonucleotide probe #10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 8 A; 1 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                High-density gene chip making process.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               examples from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Fig 15; 19pp; Chinese.
                                                                                                                                                                                                                                            895
                                                                                                                                                                                                                                                                                                                                                                         AAA79747 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                                               18 GACTGTGGGGCCATCA 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                          880 GACTGTGGGAACATCA
                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lu Z, Wang Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYDO-) UNIV DONGNAN.
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                                                                                                                                                                                  Local Similarity
les 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
Les 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CN1252452-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                              AAA79747;
                                                                                                                                                                   Query Match
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Matches
                                                                                                                                                                                                                                                                                                                                       RESULT 791
                                                                                                                                                                                                        Matches
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(a) Fusing a microcell comprising the foreign chromosome or chromosome fragment, with a cell having a high efficiency for homologous excombination; (b) marking the desired site of insertion of the foreign chromosome using a targeting vector; and (c) inducing deletion or translocation at the marked site. Transgenic animals produced by the method are useful to provide disease models and knockout animals, and in the production of human proteins, particularly human antibodies. This sequence is used in the method of the invention
                                                                                                                                         Foreign chromosome; microcell fusion; homologous recombination; antibody; targeting vector; transgenic animal; disease model; knockout animal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Producing a cell containing modified foreign chromosomes, useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NO: 14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                         Primer 2 for human immunoglobulin kappa variable region gene Vk1-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human, E2F transcription factor 3; antisense; E2F-3; cancer;
phosphorothicate backbone; infection; inflammation; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human E2F transcription factor 3 mRNA antisense sequence SEQ ID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.4; DB 1; Length 20;
33.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                 Oshimura M, Ishida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 55; 316pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                 Yoshida H, Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               generation of transgenic animals.
              AAA09925 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  356 CTGATGGGGAGAGTGA 371
                                                                                                                                                                                                                                                                                                    99WO-JP004518.
                                                                                                                                                                                                                                                                                                                                    98JP-00236169.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGATGGTGAGAGTGA 20
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                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15; Conservative
                                                                                                                                                                        PCR primer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                 (KIRI ) KIRIN BEER KK
                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-246479/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                     WO200010383-A1.
                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                    23-AUG-1999;
                                                                                                                                                                                                                                                                                                                                    21-AUG-1998;
                                                                            05-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-APR-2001
                                                                                                                                                                                                                                                                     02-MAR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                 romizuka K,
                                                                                                                                                                                                                                                                                                                                                                                                              Kuroiwa Y;
                                            AAA09925;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC67141;
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AAA09925
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The present sequence is human secreted Frizzled-related protein 4 (sFRP4) gene specific reverse transcription PCR (RT-PCR) primer. The invention relates to a method for treating or preventing chronic obstructive pulmonary disease (COPD) such as emphysema, asthma and chronic bronchitis in a subject. The method involves administering to the subject, an agent effective to inhibit apoptosis by inhibiting the expression of a secreted Frizzled-related protein (sFRP) gene. It is also useful in antisense
                                                                                         The present invention provides a number of oligonucleotides which selectively hybridise to either Vibrio parahaemolyticus. Escherichia coli or Staphylococcus aureus genes. These organisms are associated with food poisoning, and the sequences can be used to determine its cause and thus determine the appropriate treatment. The present sequence is one of the
labile genes of toxigenic Escherichia coli, useful as primers for gene amplification to detect E. coli in cases of food poisoning, diarrhea or in food inspection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Inhibition of apoptosis for the treatment or prevention of obstructive pulmonary disease comprises inhibiting expression of secreted Frizzled-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Secreted Frizzled-related protein; sFRP; chronic bronchitis; asthma; chronic obstructive pulmonary disease; COPD; antisense therapy; human; emphysema; reverse transcription PCR; RT-FCR primer; sFRP4 gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 14.4; DB 1; Length 20;
Pred. No. 8.1e+02;
                                                                                                                                                                                                                              0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02;
                                                                                                                                                                                                                                                         i; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                  Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human sFRP4 gene specific reverse RT-PCR primer.
                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              related protein gene in lung cells.
                                                                  Example 2; Page 29; 122pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 35; 79pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                        224 ATGAGAGTGGTGG 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-00514885.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%;
                                                                                                                                                                                                                                             93.8%;
                                                                                                                                                                                                                                                                                                                                                                                              AAD17411 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                 ATGAGAGTGGTAGTGG
                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-557764/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200164717-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
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                                                                                                                                                                                                                                                            15;
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                                                                                                                                                                        probes of
                                                                                                                                                                                                                                                                                                                                                                                                                           AAD17411;
                                                                                                                                                                                                                                                                                                                    16
                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                               phosphorothioate backbones directed at the human E2F transcription factor 3 (E2F-3) coding sequences. These can be used in the therapy of diseases which can be treated by modulating E2F-3 expression and to prevent infection, inflammation and tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         χ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New oligonucleotides that are selectively hybridizable with the heat-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                             Novel antisense compounds targeted to E2F transcription factor 3 for diagnosis, prophylaxis and treatment of diseases associated with E2F transcription factor 3 such as infection, inflammation or tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shirasaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       coli; Vibrio parahaemolyticus; Staphylococcus aureus;
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                                                                                                                                                                                                                                                                                                                                                    The present invention provides antisense oligonucleotides with
                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.4; DB 1; Length 20;
ilarity 93.8%; Pred. No. 8.16+02;
Conservative 0; Mismatches 1: Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nishimura N,
                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          parahaemolyticus detection probe SEQ ID NO: 6.
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                                                                                                                                                                                                                                                                                                                     Claim 14; Col 41-42; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fukushima S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
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92JP-00066082.
92EP-00307606.
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                                                                                                 24-FEB-2000; 2000US-00513729
                                                                                                                            24-FEB-2000; 2000US-00513729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF58946 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       food poisoning; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGAAGCAGTACCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    parahaemolyticus.
                                                                                                                                                          (ISIS-) ISIS PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-246903/26.
                                                                                                                                                                                                                 WPI; 2001-101698/11
                                                                                                                                                                                     Wyatt J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tada J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
les 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EP1085100-A1
          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-FEB-1992;
24-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-AUG-1992;
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                                      US6165791-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-MAR-2001
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                                                                                                                                                                                                                                                                                          formation
                                                                                                                                                                                     Popoff I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               862
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WO200142441-A2
                                   Oryza sativa.
                                                                                                         08-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                           chloroplasts
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                                                                      14-JUN-2001
                                                                                                                                                                                                                   recipient
                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                                                   New oligonucleotides that are selectively hybridizable with the thermostable enterotoxin genes of enterotoxigenic Escherichia coli, useful as primers for gene amplification to selectively detect E. coli in
                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention provides a number of oligonucleotides which selectively hybridise to either Vibrio parahaemolyticus, Escherichia coli or Staphylococcus aureus genes. These organisms are associated with food
                                                                                                                                                                                                                                                                                                                                                                                                                                             poisoning, and the sequences can be used to determine its cause and thus determine the appropriate treatment. The present sequence is one of the probes of the invention
                                                                                                                                                                                                                                                                                                          Shirasaki Y;
 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                     Escherichia coli; Vibrio parahaemolyticus; Staphylococcus aureus;
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Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
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                                                                                                                                    parahaemolyticus detection probe SEQ ID NO: 6.
                                                                                                                                                                                                                                                                                                          Ozaki H,
Mismatches
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                                                                                                                                                                                                                                                    92JP-00030755.
92JP-00066082.
92EP-00307606.
                                                                                                                                                                                                                                                                                                          Tada J, Fukushima
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                 335 ACGAGGACTTGAAGAT 350
                                                                                                                                                                                                                                    20-AUG-1992; 2000EP-00125532.
                              ATGAGGACTTGAAGAT 17
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                                                                              AAF58888 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      224 ATGAGAGTGGTGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 ATGAGAGTGGTAGTGG
                                                                                                                   (first entry)
                                                                                                                                                               food poisoning; probe; ss
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                cases of food poisoning
                                                                                                                                                                                Vibrio parahaemolyticus
                                                                                                                                                                                                                                                                                       (SHMA ) SHIMADZU CORP
                                                                                                                                                                                                                                                                                                                                    WPI; 2001-246904/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 15; Conserv
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                                                                                                                                                                                                                                                     18-FEB-1992;
                                                                                                                                                                                                                                                             24-MAR-1992;
20-AUG-1992;
                                                                                                                                                                                                 3P1085101-A2
                                                                                                                  06-JUN-2001
                                                                                                                                                                                                                   21-MAR-2001
15;
                                                                                                                                                                                                                                                                                                                  Yamagata K;
                                                                                                                                                                                                                                                                                                          Chashi T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH22485;
                                                                                                 AAF58888;
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                                                                     AAF58888/c
Matches
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The invention relates to a method of obtaining a stable transplastome, by transforming a recipient plastome (RP) with a polynucleotide having a 5' sequence homologous to a region of RP, and joined to it, a sequence heterologous to Recomprising a coding region operably linked to regulatory region capable of securing expression of coding region in the plastid and joined to it, and a 3' sequence homologous to a region of RP. The method is useful for obtaining a transplastomic plastid, by transforming a plastome within a plastid such as proplastid, amyloplast, chromoplast, etioplast or leucoplast, preferably chloroplast. The method is useful for obtaining a transplastomically expressed protein. The method provides high, uniform, reliable expression of transgenes in plants, with stable inheritance of the trait by avoiding the potential for the dangerous spread of transgenes to the ecosystem. The present
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Obtaining a stable transplastome for producing a transplastomic cell, plant or seed, comprises transforming a recipient plastome with a polynucleotide comprising a 5' and 3' sequence homologous to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human Nck-2 phosphorothioate antisense oligonucleotide, SEQ ID NO:77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequence represents a PCR primer used in primer extension assays for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             analysis of transcription initiation from rice promoters in tobacco
Transplastome; plastome; plastid; chloroplast; transgene; plant; psbA gene; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ő
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ITGE-) INT CENT GENETIC ENG & BIOTECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ferraiolo G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 8; Page 113; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Reddy S, Sadhu L, Shukla V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1186 ATGGCCACAGGCCGTC 1201
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                                                                                                                                                                                                                                                                                                                                                                                                                     08-DEC-2000; 2000WO-EP012446.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99GB-00029075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-JUL-2000; 2000GB-00017369
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Tue Nov

Homo sapiens.

US6165728-A 26-DEC-2000 19-NOV-1999;

Ward DT,

19-NOV-1999;

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The present invention provides the sequences of a number of oligonucleotides which selectively hybridise to the Staphylococcus aureus enterotoxin A, B, C, Dor E genes. Also provided are the sequences of probes for Escherichia coli and Vibrio parahaemolyticus genes. These are useful in the identification of the cause of food poisoning in humans, and in food inspection procedures
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genes and proteins involved in the upstream of the pathway of degradation
                                                                                                                                                                                                                                                                                                   New oligonucleotides that are selectively hybridizable with the entA, B, C, D or E gene of Staphylococcus aureus, useful as primers for gene amplification to selectively detect S. aureus in cases of food poisoning or in food inspection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to coding sequences for proteins such as aromatic dihydrodiol dehydrogenase, aromatic diol oxygenase, hydratase-
                                                                                                                                                                                       Shirasaki Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Aldehyde-dehydrogenase; enzyme; phenanthrene; anthracene; PCR primer; aromatic dihydrodiol dehydrogenase; aromatic diol oxygenase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                       Nishimura N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                       Ozaki H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 29; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; Page 7; 47pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of a polycyclic aromatic compound
                                                                                                                                                                                       Tada J, Fukushima S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                            92JP-00030755.
92JP-00066082.
92EP-00307606.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    224 ATGAGAGTGGTGG 239
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20-AUG-1992; 2000EP-00125530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93.8%;
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                                                                                                                                         (SHMA ) SHIMADZU CORP.
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                                                                                                                                                                                                                                                         WPI; 2001-259596/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-002935/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer KP139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JP2001245662-A.
                                            18-FEB-1992;
24-MAR-1992;
                                                                                                                                                                                  Ohashi T, T
Yamagata K;
                                                                                          20-AUG-1992;
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  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequences AAC92649-C92728 represent antisense oligonucleotides targetted to the human Nck-2 gene, which inhibit its expression. The antisense oligonucleotides were designed to target different regions of the human Nck-2 miNUA, and were analysed for their effect on Nck-2 miNUA levels by Collyannucleotides were analysed for their effect on Nck-2 miNUA levels by Mck-beta and Grb4), contains both SH2 and SH3 suc homology domains and functions as an adapter protein in integrin—mediated and receptor Tyrosine kinase-mediated signal transduction, particularly in growth factor receptor signalling and integrin signalling via its connect growth factor signalling and integrin signalling via its interaction with PINCH, a LIM domain-containing adapter protein which is interaction with EGF (epidermal growth factor) and Which is involved in integrin, growth factor and Whit signalling pathways. Nck-2 also interacts with EGF (epidermal growth factor) and Which is synthesis in an SH2-dependent manner. Nck-2 is also able to interact with CG Therefore implicated in the development of cancer, particularly leukaemia and breast cancer. The oligonucleotides of the invention are useful for extraction, such as leukaemia and hyperser cancer. The oligonucleotides of the invention are useful for extracted in the development of cancer, particularly leukaemia and hyperser cancer. The oligonucleotides of the invention are useful for extraction, and is such as leukaemia and hyperser cancer.
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                                                                                                                                                                                                                                                                                                                                                                            Novel antisense compound which inhibits expression of human nck-2 useful for treating disease or condition associated with expression of nck-2, and as research reagents, kits and diagnostics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vibrio parahaemolyticus; Escherichia coli; Staphylococcus aureus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      V parahaemolyticus gene specific probe SEQ ID NO: 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           expression, such as leukaemia and breast cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               food poisoning; selective probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Col 41-42; 38pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 ACACGGAGAAGTCGCT 19
                                                                                                                                           99US-00444053
                                                                                                                                                                                       99US-00444053
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ID AAF79782 standard; DNA; 20
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                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                              WPI; 2001-090480/10.
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Best Local Similarity
Matches 15; Conserv
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EP1085099-A2

21-MAR-2001

29-MAY-2001

AAF79782;

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The patent discloses a method of producing a protein of interest which involves expressing a polynucleotide fusion construct in a plastid to produce a fusion protein comprising the protein of interest where the construct comprises a polynucleotide coding sequence of the protein of interest operably linked to a polynucleotide coding sequence of a fusion or protein partner. The methods of the invention are useful for producing a protein of interest which comprises a human protein or its biologically active variant or fragment, a pharmaceutically active protein, an IFN damma or its biologically active variant or fragment. They are useful for the production of transgenic plants. Methods of the invention are also useful for the generation of transplastomic plant cells, plants and seeds. The protein of interest obtained by the methods of the invention is useful for the manufacture of a medicament for treating a disease
aldorase and aldehyde-dehydrogenase (ABA01198-ABA01201 and AAM52344-AAM52347), which are involved in the degradation of polycyclic aromatic compounds. The enzymes are useful as reagents for converting the metabolite intermediates of polycyclic aromatic compounds such as phenanthrene and anthracene. The present sequence is a PCR primer, which
                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Producing a protein of interest, e.g., a pharmaceutically active pro comprises expressing a polynucleotide fusion construct in a plastid producing a fusion protein comprising the protein of interest.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Primer #13 related to the method of producing a desired protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transgenic plant; transplastomic plant; medicament; primer; ss.
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0
                                                                                                                                                                        0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; ive 0; Mismatches 1; Indels
                                                                                              was used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                      Sequence 20 BP; 1 A; 9 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CENT GENETIC ENG & BIOTECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 75; 92pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               producing a protein of interest
                                                                                                                                                                                                                                                                                                                                                                                            멾
                                                                                                                                                                                                                                                         921 CCTGTTCCAGCTGCTC 936
                                                                                                                                                                                                                                                                               CCTGCTCCAGCTGCTC 16
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                                                                                                                                                                                             93.8%;
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                                                                                                                                                                                             Local Similarity 93.8
nes 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified
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The invention relates to constructing (M1) a strain of diploid fungal cells in which both alleles of a gene are modified, comprising modifying cells in which both alleles of a gene are modified, comprising modifying cone allele by insertion or replacement by a cassette having an expressible selectable marker and modifying other allele by concurred. On the expression of the second allele is regulated by the promoter. (M1) is useful for constructing a strain of diploid fungal cells in which both alleles of a gene are modified. The diploid fungal cells having both alleles modified are useful for identifying a gene that contributes to the survival or growth of a fungus, a gene that contributes to the virulence and/or pathogenicity of a fungus a gene that contributes to the resistance of a diploid fungus to an antifungal agent that inhibits the growth of a diploid fungus and for identifying a therapeutic agent for treatment of a mammalian disease. (M1) is useful for identifying a compound which modulates the activity of a gene product, preferably enzymatic activity, carbon compound carabolism, biosynthetic, transporter, transcriptional, translational, signal transduction, DNA replication and cell division activity. The method is useful for identifying a compound having the activity to inhibit growth or proliferation of C. albicans cells and for the present used in the method of the invention. Note: The sequence dat for the present is that of a per product the present sequence of a per product of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        this patent is not represented in the printed specification but is based on sequence information supplied to Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Constructing strains for identifying gene products as effective targets for therapeutic intervention, by inactivating in the strain one allele of a gene and placing other allele of the gene under conditional expression.
                                                                                                                                                                                                                                                                                                                             Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
signal transduction; DNA replication; cell division; growth;
proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 36; SEQ ID NO 5572; 167pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                     Candida albicans GRACE strain PCR primer SEQ ID NO 5572.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ohlsen KL;
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1186 ATGGCCACAGGCCGTC 1201
                                                                                                                                                      ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-DEC-2000; 2000US-0259128P.
20-FEB-2001; 2001US-00792024.
22-AUG-2001; 2001US-0314050P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Boone C,
                                       16
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                                                                                                                                                      ABZ31353 standard; DNA; 20
                                                                                                                                                                                                                                         (first entry)
                                     1 Argcccacacacccrc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-566694/60.
                                                                                                                                                                                                                                                                                                                                                                                                                       Candida albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200253728-A2.
                                                                                                                                                                                                                                            30-JAN-2003
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                                                                                                                                                                                                ABZ31353;
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DB 1; Length 20;

Score 14.4;

0.88;

Score 14.4; DB 1; Length 20; Pred. No. 8.1e+02;

0.8%; 93.8%;

Query Match Best Local Similarity

BP.

(first entry)

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Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
                                                                                                                   Capture oligonucleptide Zip ID#87 oligo #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 5; Fig 29; 300pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CORR ) CORNELL RES FOUND INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                  14-APR-2000; 2000US-0197271P.
                                                                                                                                                                                                                                                                                                                                                                                              04-APR-2001; 2001WO-US010958.
  ABI93000 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                   WO200179548-A2.
                                                                             15-FEB-2002
                                                                                                                                                                                                                                                                                                                                                       25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Barany F,
                                                                                                                                                                                                                                                                            Synthetic.
                                        ABI93000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to a new antisense compound targeted to inhibiting the expression of human glioma-associated oncogene-2. The invention is useful for thinditing the expression of human glioma-associated oncogene-2 in cells or tissues. The invention is also is useful for treatment of diseases associated with human glioma-associated oncogene-2. The invention is further useful for disquisping thindings, prophylaxis, as research reagents and kits, for distinguishing functions of various members of a biological pathway, and in antisense gene therapy. The invention is also useful prophylactically, e.g., to prevent or delay infection, inflammation or tumour formation. The present nucleic acid sequence represents an objective that was used in the methods of the
                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel antisense compound that hybridizes and inhibits nucleic acid encoding human glioma-associated oncogene-2, useful for treatment of diseases associated with human glioma-associated oncogene-2.
                                                                                                                                                                                                                                                                                                                                                   Human; glioma-associated oncogene-2; antisense compound; infection; inflammation; tumour formation; antiinflammatory; antitumour; inhibitor of human glioma-associated oncogene-2 expression; antisense gene therapy; phosphorothioate; ss.
                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.4; DB 1; Length 20; 3.8%; Pred. No. 8.1e+02; ve 0; Mismatches 1; Indels
                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              invention to inhibit human glioma-associated oncogene-2
d. No. 8.1e+02;
Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 2 A; 4 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                   Chimeric phosphoroticate oligonuclectide #12.
93.8%; Pred.
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                    ö
                                                             245
                                                                                                                                                                                                 ABS73431 standard; DNA; 20 BP.
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                                                                                                 4 Greeregreereg 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.8%;
Best Local Similarity 93.8%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                            (first entry)
                                                          230 GTGGTGGTGGTGGCGG
                    15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Freier SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-697096/75.
  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US6440739-B1.
                                                                                                                                                                                                                                                                            03-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                       ABS73431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chimeric.
                                                                                                                                                          RESULT 803
                    Matches
                                                                                                                                                                              ABS73431/
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Kliman R;

Gerry NP, Favis R,

Zirvi M,

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The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fundgaturus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents c.g. Salected from Onchowerava volvulus, Entamoeba histolyfica and Dracunculus comedinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

CC medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

CC Detecting cancer involving oncogenes, tumour suppressor genes or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The centend is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the computer of particular sites and indentifying if ligation of the oligonucleotide probe companion invarious types 16 and sequences. ABIS2074 to presence or absence of the target nucleotide sequences. ABIS2074 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ó
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.4; DB 1;
33.8%; Pred. No. 8.1e+02;
Ive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              844 GAGTACCTGGACAAGG 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93.88;
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Best Local Similarity
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ADC65809/c

RESULT

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Gaps

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1537 AAGGAGGCCAGCCTTC 1552

18 AAGGAGCCCAGCCTTC 3

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RESULT 804 ABI93000

Tue Nov

18-DEC-2003

ADC65809

03-JAN-2003

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The invention relates to a novel polynucleotide isolated and purified from a human gene having any one of 935 fully defined sequences as given in specification, or a sequence having a base substitution. The invention further relates to: an oligonucleotide containing single nucleotide polymorphisms; a PCR primer set chosen from the combination of two DNA fragments from any one of 1220 fully defined sequences as given in specification; a labelling probe containing the SNP containing oligo; and a microarray equipped with the SNP containing oligo. The isolated human gene of the invention is useful for detecting the single nucleotide polymorphisms in human gene. The isolated human gene is also useful for diagnosis of disease and determination of side effect to a medical agent. The isolated human gene is also effective in detecting single nucleotide polymorphism in a human gene. This polymucleotide sequence represents one of the PCR primers used in the single nucleotide polymorphism
                                                                                                                                                                                                                                                       Novel polynucleotide useful for detecting single nucleotide polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, antisense, lung dysfunction, nasal airway dysfunction, antinflammatory steroid; ubiquinone, antiinflammatory, antiallergic; antiasthmatic; hypotensive; townstathmatic; hypotensive; townstathmatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Katz E, Pabalan J, Aguilar D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 4 A; 0 C; 11 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                       Claim 2; SEQ ID NO 1532; 704pp; Japanese
                                                                                                                                                              (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Li Y, Sandrasagra A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589 GAGATTGGCTTTGGGA 604
                                                                   12-FEB-2002; 2002JP-00034717.
                                                                                                                12-FEB-2002; 2002JP-00034717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-APR-2002; 2002WO-US013135.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001US-0286137P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 93.00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABZ84889 standard; DNA; 20
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                                                                                                                                                                                                         WPI; 2003-820454/77
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                                                                                                                                                                                                                                                                               in human gene.
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                       26-AUG-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 807
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABZ84889
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the nucleic acid encoding transforming growth factor beta (TGF-beta) receptor II. The antisense oligonuclectides of the invention are useful for treating: hyperproliferative disorders (e.g. breast cancer), or an autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence represents a 2'-O-methoxyethy! gapmer oligonuclectide with a phosphorothioate backbone that is targeted to mouse TGF-beta receptor II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention comprises antisense oligonucleotides that are targeted to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       reansforming growth factor beta-receptor II, useful for preparing a
composition for treating hyperproliferative disorder e.g., lung, liver,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human; single nucleotide polymorphism; microarray; side effect; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New compound having a sequence targeted to a nucleic acid encoding
                                                                                                                                                                                                         transforming growth factor beta receptor II; TGF-beta receptor II; hyperproliferative disorder; breast cancer; autoimmune disorder; theumatoid arthritis; 2'-O-methoxyethyl gapmer;
                                                                                                                                        Mouse TGF-beta receptor II targeted antisense oligonucleotide #8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Single nucleotide polymorphism detection primer, SEQ ID No 1532.
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 10 C; 6 G; 0 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 3; SEQ ID NO 105; 141pp; English.
                                                                                                                                                                                                                                                                            phosphorothioate backbone; ss; murine
                                                                                                                                                                                      antisense oligonucleotide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADF87949 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-JUN-2002; 2002WO-US019665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-JUN-2001; 2001US-00888361
ADC65809 standard; DNA; 20
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Best Local Similarity 93.8'
Matches 15; Conservative
                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     colon or gastric cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-175279/17.
                                                                                                                                                                                                                                                                                                                                                                     WO2003000656-A2
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                                                                                                                                                                                                                                                                                                                            Mus musculus
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composition

Murray SF,

primer; PCR

ADF87949;

RESULT 806 ADF87949

19

ઠે q Synthetic

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Gaps

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10017621-381.rng

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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding resign, 5 or 3 end genomic flanking regions, 5 or 3 and 3 intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or coding record and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention comparishment of masal airway dysfunction and ubiquinone. A composition may have a nutiinflammatory antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also confit or enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing levels of, or reducing sensitivity to adenosine, reducing levels of, or reducing sensitivity to adenosine, reducing bronchoconstriction, lung suffactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed or specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                             Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; antisense; lung dysfunction; nasal airway dysfunction; antilnflammatory steroid; ubiquinone; antilnflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchodonstriction; lung allergy; lung inflammation; respiratory disease; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 10 A; 2 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                    Claim 15; SEQ ID NO 131; 872pp; English.
Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            133 ATGAAGAAGATCAAAC 148
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15; Conservative
                                        WPI; 2003-229219/22
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Best Local Similarity
Tang L,
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                                                                                                                                                ubiquinone.
Miller S,
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Pabalan J, Aguilar D;

Katz E,

Sandrasagra A,

Li Y,

Nyce JW,

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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the intiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 mucleotides of junctions of genes encoding a polypeptide associated with lung and/or assal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a immunosuppressive, and cytostatic activity. The composition may have a come in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of antiinflammatory steroid in a subject, for reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung surfactant in a subject's tissue, or treating bronchoconstriction, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO cat fip.wipo.int/pub/published_pot_sequences
                                                                                 Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; antisense; lung dysfunction, nasal airway dysfunction; antinflammatory steroid; ubiquinone; antinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aguilar D;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02; ve 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                              Disclosure; SEQ ID NO 2752; 872pp; English.
Tang L, Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nyce JW, Li Y, Sandrasagra A,
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                                          WPI; 2003-229219/22
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                                                                                                                                                       ubiquinone
Miller S,
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Page 405
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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' initron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a cuse in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing levels of denosine creceptor, producing bronchodilation, increasing levels of adenosine receptor, producing bronchodilation, increasing levels of uniquinnon or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung allergies, or a respiratory disease or condition. Once: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
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                                                                  Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Immortalized cell; progenitor cell; neural progenitor cell; brain injury; spinal cord injury; Ngn2; PCR; primer; ss.
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Pred. No. 8.1e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                           Claim 15; SEQ ID NO 258; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer used to amplify Ngn2 cDNA.
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Best Local Similarity
Local 15; Conserv
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                                   WPI; 2003-229219/22
Tang L,
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                                                                                                    The specification describes a method of immortalizing progenitor cells, including neural progenitor cells. The method comprises providing a population of progenitor cells and immortalizing the population of the progenitor cells either before or after they are enriched or purified. The method is useful in immortalizing neural progenitor cells that may be used in treating injuries (e.g. brain or spinal cord injuries) and other diseases. PCR primers ABZ77435-36 were used to amplify cDNA encoding Ngn2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion, antiallaergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; gystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory diserses syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
brain or spinal cord injuries), comprises providing a population of progenitor cells and immortalizing the cells before or after they are enriched or purified.
                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 oligonucleotide containing less percentage of adenosine, targeted
nucleic acids associated with lung airway or lung dysfunction, and
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                                                                                                                                                                                                                                                                                                0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; tive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human myosin X-derived oligonucleotide SEQ ID 2752.
                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 8 C; 2 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                              from immortalized cells of the invention
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Tang L, Shahabuddin S;
                                                                     Example 5; Page 23; 55pp; English.
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es 15; Conserva
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comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

Immortalizing neural progenitor cells useful in treating injuries (e.g.

This invention describes a novel composition (a) a first active agent

Pharmaceutical composition for treating asthma, has antisense

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surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery or the invention also adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and associated inflammation, allergies and/or surfactant hypoproduction are associated distress endiation such as pulmonary vascomestriction, cinflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary contraction, and contraction the emphysema, chronic obstructive pulmonary disease, pulmonary contractions and contraction and pulmonary contractions and contraction obstruction and contractions and contractions on a such as pulmonary diseases, pulmonary contractions on a such as pulmonary contractions on a such as pulmonary contractions on a such as pulmonary diseases, pulmonary contractions on a such as contractions on a such as pulmonary contractions on a such as contractions on a such as pulmonary contractions on a such as contraction
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hyposensive; immunosuppressive; crostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              prevent any unwanted effects due to it
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Tang L, Shahabuddin S;
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Matches 15; Conservative
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Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABD21119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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comprising objectives a mover composition, an arrive agency, comprising objective and control describes a factive of adenosine (A) or (A) receptors, reducing adenosine (A) or (A) receptors, reducing adenosine of hyposecretion, when administered to a mammal. The objection or hyposecretion, when administered to a mammal. The objection of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mkNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the objectives, (c) and paparate containers, (b) the objectives, (c) and paparate containers, (b) the objectives, or the invention has antiallergic, antiinflammatory, antiasthmatic, anticutions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analymention and composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production of reduce the amount of target polypeptide present in the lungs. The reduce the amount of target polypeptide present in the lungs. The composition and/or bronchoconstriction and/or lung
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, with a disease or condition such as pulmonary vasoconstriction, full almantion, allergies, asthma, impeded respiration, respirator, transplantation, respirator, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
                                                                                                                                                                                   invention describes a novel composition (a) a first active agent,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                         oligonuclectide containing less percentage of adenosine, targeted unucleic acids associated with lung airway or lung dysfunction, and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.4; DB 1; Length 20;
13.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 10 A; 2 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                       Claim 15; SEQ ID NO 131; 763pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    133 ATGAAGAAGATCAAAC 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABD21246 standard; DNA; 20 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15; Conservative
                                                                                        bronchodilating agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABD21246;
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Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic fihilitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

WO200285309-A2 Homo sapiens

WPI; 2003-093058/08.

Human transglutaminase-derived oligo SEQ ID 258.

29-JUL-2004 (first entry)

10017621-381.rng

Page 407

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of the invention has antiallergic, antilifammatory, antiathmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary cransplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory fract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
                                                                                                                                                                                                                                                                                                                                Pharmaceutical composition for treating asthma, has antisense oligonuclectide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                    Pabalan J, Aguilar D;
                                                                                                                                                                                                    Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 15; SEQ ID NO 258; 763pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            prevent any unwanted effects due to it
                                                                                                                                                                                                                               Tang L, Shahabuddin S;
                                                23-APR-2002; 2002WO-US013143.
                                                                                                 24-APR-2001; 2001US-0286036P.
                                                                                                                                                                                                    Sandrasagra
                                                                                                                                                 (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                 oronchodilating agent
                                                                                                                                                                                                                                                                             WPI; 2003-093058/08.
                                                                                                                                                                                                    Li Y,
                                                                                                                                                                                                                  Miller S,
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Gaps .. 0 Score 14.4; DB 1; Length 20; Pred. No. 8.1e+02; 0; Mismatches 1; Indels Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other; 0; Query Match 0.8%; Best Local Similarity 93.8%; Conservative 15; Matches

1171 TGCATCTTCTATGAGA 1186 20 TGCATCCTCTATGAGA

ADI41030 standard; DNA; 20 (first entry) 22-APR-2004 ADI41030; AD141030/ ID AD14. XX AC AD14. XX DT 22-A: XX XX Huma: XX XX Huma: RESULT

Human HGPRBMY41 gene specific antisense primer.

Human; 88; primer; GPCR; G protein-coupled receptor;

reproductive disorder; testicular disorder; vas deferens disorder; spermatogenesis; infertility; XX male; epididymitis; cryptorchidism; sperm transport disorder; testicular cancer; testicular germ cell tumour; male hormone disorder; premature pubberty; Kallman syndrome; Cushing's syndrome; immune disorder; leukaemia; arthritis; asthma; AIDS; rheumatoid arthritis; inflammatory bowel disease; sepsis;
T-cell mediated cytotoxicity; graft-versus-host disease;
autoimmunity disorder; systemic lupus erythematosus;
drug induced haemolytic anaemia; Sjogren's disease;
T-cell maturation disorder; B-cell maturation disorder;
vascular disorder; stroke; ischaemia; mycoardial infarction;
atherosclerosis; gastrointestinal disorder; pulmonary disorder;
brain disorder; endocrine disorder; cancer; gene therapy; PCR.

Homo sapiens

US2004018976-A1.

29-JAN-2004.

13-MAY-2003; 2003US-00436715.

14-MAY-2002; 2002US-0380336P

(FEDE/) FEDER J N. (MINT/) MINTIER G.

(RAMA/) RAMANATHAN C S.

Ramanathan CS; Feder JN, Mintier G,

WPI; 2004-122081/12.

New human G-protein coupled receptor polypeptide and polynucleotide, useful for diagnosing, preventing, treating or ameliorating a medical condition, e.g. reproductive disorder, immunodeficiency disease or testicular cancer

Example 4; SEQ ID NO 90; 290pp; English.

The invention relates to an isolated muman of proteins receptor proteins minus the start methionine (and the region of the polymorlectide proteins minus the start methionine (and the region of the polymorlectide proteins minus the start methionine (and the region of the polymorlectide condition). The proteins are designated HGRRBWY30-1, HGRBBWY30-2, HGRBBWY30-2, HGRBBWY31-1, HGRBBWY41-2, HGRBBWY41-3, HGRBBWY42-1, HGRBBWY41-1, HGRBBWY44, Also included are expression vectors, host cells, antibodies, preventing (treating or ameliocating) a medical condition comprising administering to a mammalian subject the polypeptide or its modulator and diagnosing a pathological condition or a susceptibility to a pathological condition in a subject the polypeptide or the presence or amount of expression of the polypeptide. The human G-protein coupled receptor polypeptide or a backoff or a susceptibility to a pathological condition based on the polypeptide or polymorlectide can be used for diagnosing a pathological condition or a susceptibility to a pathological condition, such as the polypeptide or polymorlectide can be used for diagnosing a pathological condition or a susceptibility to a pathological condition, such as a disorder related to aberrant G-protein coupled receptor activity, and for preventing, treating or ameliorating a medical condition, such as disorder related to aberrant G-protein coupled respond to the polymetic or polymorlectic or a disorder, infertility, Klinefletter's syndrome, Xmale, disorder, infertility, Klinefletter's syndrome, Xmale, capididymitis, genital warts germinal cell aplasia, cryptcochidism, complete puberty, Kallman syndrome, Viral orchitis, serion an immune disorder, a proliferative immune disorder, prevamenture puberty, kallman syndrome, Cushing's syndrome an immune disorder, a proliferative immune disorder, prevamenture puberty, kallman syndrome, Cushing's syndrome, an immune disorder, a proliferative immune disorder, prevamenture, manel an immune disorder, a proliferative immune disorder The invention relates to an isolated human G protein-coupled receptor

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autoimmunity disorders, such as autoimmune infertility, demyelination, systemic lupus erythematosus, drug induced haemolytic anaemia, Sjogren's disease, scleroderma, T-cell maturation disorders, B-cell maturation disorders, vascular disorders, stroke, ischaemia, myocardial infarction, atherosclerosis, embolisms, thrombosis, gastrointestinal disorders, irritable bowel syndrome, ulcers, pulmonary disorders, brain disorders, endocrine disorders, or ovarian, stomach, colon or kidney cancer or its related proliferative condition (many other diseases and disorders are listed in the specification). The antibodies may be used to purify, detect and target the G-protein coupled receptor polypeptides. The polymucleotides are also useful in gene therapy. The present sequence is a gene specific PCR primer for a nucleic acid encoding a novel GPCR of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER
/note= "All linkages are phosphorothioate linkages and
all cytidines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, 88; antisense gene therapy; endothelial differentiation gene EDG5; G protein-coupled receptor; development; wound healing; tissue regeneration; cellular proliferation; apoptosis; cancer; anglogenesis; inflammation; hyperproliferative disorder; developmental disorder.
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0
                                                                                                                                                                                                                                                                        0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                          Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mod_base= OTHER
/note= "2'-methoxyethyl residue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mod_base= OTHER
/note= "2'-methoxyethyl residue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human EDG5 antisense oligonucleotide ISIS126665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                          956 ACCGGCAGAAGGTGCT 971
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADJ62594 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                                                       Best Local Similarity 93.8%;
Matches 15; Conservative
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/*tag= a
/*tag= a
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/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag=
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modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADJ62594;
                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 815
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New antisense oligonucleotide targeted to nucleic acid encoding

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The invention relates to a compound 8-80 nucleobases in length targeted to, and which specifically hybridises with a nucleic acid molecule encoding endothelial differentiation gene 5 (EDG5, a G protein coupled receptor, involved in development, wound healing, tissue regeneration, cellular proliferation, apoptosis, cancer, angiogenesis and cellular proliferation, and inhibits the expression of EDG5, i.e. is an antisense compound and a carrier or diluent and a method for screening an antisense compound (by contacting a preferred target region of a nucleic acid molecule encoding EDG5 with one or more candidate antisense compound (by contacting a preferred target region of a nucleic acid compounds comprising at least an 8-nucleobase portion that is compounds compounds that inhibit the expression of a nucleic acid encoding EDG5. The compounds that inhibit the expression of a nucleic acid encoding EDG5. The compound, composition and methods are useful for treating a disease or condition associated with EDG5, such as a hyperproliferative disorder, apoptosis. They are also useful in research and diagnostics for modulating the expression of EDG5. Experimental protocols are described to the contacting and and diagnostics for the contacting and are given. The present sequence is an AS oligonucleotide
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endothelial differentiation sphingolipid G-protein-coupled receptor 5, for treating cancer, developmental disorder or a condition arising from aberrant apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pigmentosum; ataxia telangiectasia; Chediak-Higashi syndrome;
Fanconi's aplastic anaemia; Bloom's syndrome; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OncoseqX; diagnosis; prognosis; cancer; tumour; carcinoma; sarcoma; blastoma; lymphoma; leukaemia; neoplastic disease; hyperproliferative disorder; Gardher's syndrome; hereditary exostosis; polyendocrine adenomatosis; Peutz-Jeghers syndrome; neurofibromatosis of Von Recklinghausen; medullary thyroid carcinoma; pheochromocytoma; retinoblastoma; carotid body tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cutaneous melanocarcinoma; intraocular melanocarcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                       Example 15; SEQ ID NO 54; 50pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   169 CGAGGTGGCCGAGGCA 184
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAGGTGGCCCAGGCA 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  targeting human EDG5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Insulin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-MAY-2004
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Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention provides isolated polypeptides designated oncoseqx and their encoding polymoclecrides. The invention is useful for diagnosing, prognosing and developing a therapeutic strategy for the pathology which includes cancer, tumour, carcinoma, sarcoma, blastoma, lymphoma, leukaemia and neoplastic disease. The invention is also useful for treating hyperproliferative disorders, Gardner's syndrome, hereditary exostosis, polyendocrine adenomatosis, Peutz-Jeghers syndrome, hereditary constosis, polyendocrine adenomatosis, Peutz-Jeghers syndrome, hereditary envoitoin and pheochromocytoma, retinoblastoma, carcinoma with amyloid production and pheochromocytoma, retinoblastoma, acroid body tumour, cutaneous melanocarcinoma, intraocular melanocarcinoma xeroderma pigmentosum, ataxia telangiectasia, Chediak-Higashi syndrome, albinism, Fanconi's aplastic anaemia and Bloom's syndrome. The invention is also useful in gene therapy. The present sequence is a PCR primer used to amplify insulin-like growth factor 2 DNA. The primer is used in the exemplification of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase inhibitor; cytostatic, antidiabetic; immunomodulator; cardiant; neuroprotective; antiinflammatory; neuroprotective; antiinflammatory; neuroprotective; antiarthritic; vasotropic; ophthalmological; immunomodulatory; cardiovascular; gene therapy; inflammation; Alzheimer's disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; se.
                        Novel isolated Oncoseg polypeptide, useful for developing therapeutic strategy for pathology such as squamous cell carcinoma and fields associated with oncogenesis and tumor progression.
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                         ٥;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:992.
                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.4; DB 1; Length 20;
13.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mod_base= OTHER
/note= "2'-0-methocyethyls"
16. .20
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/note= "2'-O-methoxyethyls"
                                                                                Example; SEQ ID NO 24; 73pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADM14805 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                   756 AGTGTCCCTGCTCAAG 771
                                                                                                                                                                                                                                                                                                                                                                          93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   O
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           *tag= a
                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 93.8
Matches 15; Conservative
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WPI; 2004-224178/21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADM14805;
                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                               Query Match
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antidiabetic, immunomodulator, cardiant, neuroprotective, antiantlammatory, neuroprotective, nootropic, antiarthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase; mhoES-1; mPGES-1 inhibitor; extoration; antidiabetic; immunomodulator; cardiant; neuroprotective; antidinflammatory; neuroprotective; antidinflammatory; immunomodulatory; cardiant; gene therapy; inflammation; Alzheimer's disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; se.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9434.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression, (2) a method of inhibiting the expression of mPGES-1 in cels or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. MPGES-1 chimeric antisense oligonucleotides and antisense compounds have cytostatic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g. inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.4; DB 1; Length 20;
33.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 4; SEQ ID NO 992; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         525
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                                                                                                                                                                 2003WO-US030374.
                                                                                                                                                                                                                                                           25-SEP-2002; 2002US-0413549P.
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Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                           (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-305094/28.
WO2004028458-A2.
                                                                                                                                                                     25-SEP-2003;
                                                                                08-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                 Gierse JK;
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ss; cytostatic; antidiabetic; foxhead box O1A inhibitor; forkhead box O1A; hyperproliferative disorder; cancer; rhabdomyosarcoma; diabetes; H-ras gene; antisense; gene expression; primer.
                                                                                                                                                                                                                                             /nore= "sugar phosphate internucleotide linkages in the backbone are replaced with a phosphorothioate internucleotide linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New compounds, particularly antisense oligonucleotides, targeted to anucleic acid molecule encoding forkhead box OIA, useful for treating cancer, or type 2 diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                            'note= "nucleotides are 2'-methoxyethyl-nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "nucleotides are 2'-methoxyethyl-nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dobie KW, Bhanot S, Veniant-Ellison M, Lindberg RA,
                                                                                                                                                                                                                                                                                                                                                              'note= "all C are 5'-methylcytidines'
                                      Mouse foxhead box OlA sequence inhibitory oligo #8.
                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                /*tag= c
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                            /mod_base= OTHER
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01-JUL-2004 (first entry)
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*tag=
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(ISIS-) ISIS PHARM INC
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                                                                                                                                                                                                               misc_difference
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                                                                                                                                                                                                                                                                                                                                                                                        modified base
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                                                                                                                                                                                                                                                                                                             modified base
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                                                                                                                                                      Synthetic
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mpGES-1 gene is located on chromosome 9, more specifically to offer the present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. MPGES-1 chimeric antidiabetic, immunomodulator, cardiant, neuroprotective, antidiamatic, vasotroprofic antidiamatic, immunomodulatory and cardiovascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound to be used as mPGES-1 inhibitors and in gene therapy. The antisense compound can be used as used dex with mPGES-1 e.g., inflammation, Altheimer's condition associated with mPGES-1 e.g., inflammation, Altheimer's disease, arthritis, diabetes, cancer, ischeemia or reperfusion injury, or cophthalmic, immunological, cardiovascular or neurological disorder.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound, having a sequence targeted to a nucleic acid
                                                                            /mod_base= OTHER
/note= "phosphorothioate linkages and all cytidine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 3 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                  residues are 5-methylcytidines
                                                                                                                                                /*tag= a /mod_base= OTHER /mod_base= OTHER /note= "2'-0-methocyethyls" 16..20
                                                                                                                                                                                                                                                                       'note= "2'-0-methoxyethyls'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; SEQ ID NO 766; 132pp; English
                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             510 CTACCTGGAGAGCTG 525
                                                                                                                                                                                                                                                                                                                                                                                                                              25-SEP-2002; 2002US-0413549P
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                                          .20
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nes 15; Conserv
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                                                                                                                                                                                                                 modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ischemia.
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Shutter JR;

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                                                                     The invention relates to a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding forkhead box 01A, where the compound is at least 70% complementary to a nucleic acid molecule encoding forkhead box 01A and modulates expression of forkhead box 01A by at least 10%. The compound is useful for treating an animal having a disease or condition associated with forkhead box 01A, e.g. a hyperproliferative disorder (cancer, preferably rhabdomyosarcoma), or type 2 diabetes. This sequence corresponds to an oligonucleotide targeted to the mouse foxhead
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                     box 01A genes in order to inhibit gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
Example 18; SEQ ID NO 64; 146pp; English.
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RESULT 820

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ADN97774 standard; DNA; 20 BP

RESULT 819 ADN97774/C

Best Loc Matches

à 셤 ADN97774

SAXB

AD054235

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Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                        gallstones or obesity.
                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-347928/32.
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tes 15; Conserv
                                                                                                                                                                                       WO2004030750-A1
                                                                                                                                                               Homo sapiens.
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                                                                                                                                                                                                                                                                                                                             Kane CD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. dyslipidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hypertriglyceridemia, obesity, neurological disorders, or ischemia/repetrusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence corresponds to an antisense oligonucleotide of the
                                                                                                    ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetes; immunological disorder; cardiovascular disorder; dyslipidemia; atherosclerosis; high density lipoprotein; low density lipoprotein; how density lipoprotein; how genefity lopoprotein; hypercholesterolemia; gallstones; hypertriglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders,
                                                                               Farnesoid X receptor gene expression antisense inhibitory oligo #1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotides useful for modulating expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 4; SEQ ID NO 1608; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1658 ACACCCCTCACAGGGC 1673
                                                                                                                                                                                                                                                                                                              25-SEP-2003; 2003WO-US030353.
                                                                                                                                                                                                                                                                                                                                         25-SEP-2002; 2002US-0413588P.
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ADO54235 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-JUL-2004 (first entry)
                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15; Conservative
                                                                                                                                                                                                                                                                                                                                                                  (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            e.g. diabetes, immunol
gallstones or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-347928/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sest Local Similarity
                                                                                                                                                                                                                                                           WO2004030750-A1
                                                                                                                                                                                                                                Homo sapiens
                                                    15-JUL-2004
                                                                                                                                                                                                                                                                                    15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADO54455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                              Kane CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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ADO54455
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The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in calls or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. dyslipidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hypertriglyceridemia, obesity, neurological disorders, or ischemial/repertrigion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence corresponds to an antisense oligonucleotide of the
                                                                                 ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiatreriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetese; immunological disorder; cardiovascular disorder; dyslipidemia; atherosclerosis; high density lipoprotein; low density lipoprotein; hypercholesterolegilstones; hypertiglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    transplant rejection; immune system; rheumatoid arthritis; lupus;
inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
Farnesoid X receptor gene expression antisense inhibitory oligo #1828.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Set 2 left PCR primer for marker probe #18.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to diagnosing or monitoring transplant rejection, e.g. cardiac or kidney transplant rejection, in an individual comprises detecting the expression level of one or more genes. The methods system and kits are useful in diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic islet, lung, bone marrow or stem cell transplant rejection, xenotransplant rejection or mechanical organ replacement rejection, in an individual. The method is also useful in assessing the immune status of an individual. The methods are also useful in diagnosing and monitoring diseases that involve the immune system, e.g. rheumatoid arthritis, lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or viral, bacterial or fungal infection. The present sequence represents a primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                   Ly N, Prentice J, Morris M;
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13.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mouse; checkpoint kinase 1; Chk1; disorder; cancer; cytostatic; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            allograft rejection and other disorders.
                                                                                                                                                                                                                                                                                                                                                                                                    Claim 58; SEQ ID NO 1675; 1762pp; English.
                                                                                                                                                                                                                                 Fry K, Woodward R,
                                                                                                                                                                                                (EXPR-) EXPRESSION DIAGNOSTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1631 CCAGCAGGCAGCGCT 1646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
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                                                                                                                 24-APR-2003; 2003WO-US012946.
                                                                                                                                                                  20-DEC-2002; 2002US-00325899
                                                                                                                                                 24-APR-2002; 2002US-00131831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93.8%;
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                                                                                                                                                                                                                                                                                  WPI; 2004-400724/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense therapy;
hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best_Local Similarity
Matches 15; Conserv
                                               WO2004042346-A2.
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                                                                                                                                                                                                                                 Wohlgemuth J,
               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
                                                                                                                                                                                                                                                    Rosenberg S;
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                                                                              21-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AD025110;
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The present invention relates to antisense compounds targeted to a nucleic acid encoding human/mouse checkpoint kinase 1 (Chk1). The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of Chk1. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide is a chimeric oligonucleotide in the act one modified undernucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar molety, preferably a 2'.O-methoxyethyl (2'-MOE) sugar molety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methyloytosine. The antisense oligonucleotides are useful for the treatment of diseases such as
                                                                                                                                              New compounds, particularly oligonucleotides targeted to a nucleic acid encoding checkpoint kinase 1, useful for treating diseases associated with checkpoint kinase 1, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "This oligonucleotide has a phosphorothioate backbone and 2'-methyoxyethyl (2'-w05) wings at the 5' and 3' ends, which are 5 nucleotides in length at each end. All cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense therapy, mouse, checkpoint kinase 1; Chkl; hyperproliferative disorder; cancer; cytostatic; phosphorothioate; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mouse checkpoint kinase 1 DNA, antisense oligonucleotide #30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            hyperproliferative disorders, e.g. cancer. The present seq
represents mouse Chkl DNA target sequence for an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seguence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                                                          Watt AT;
                                                                                                                                                                                                                      Example 16; SEQ ID NO 192; 66pp; English.
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                                                                          Dobie KW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1031 CTGACTTTGGCCTGGC 1046
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16-NOV-2002; 2002US-00298994.
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/*tag= a
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                                     (ISIS-) ISIS PHARM INC
                                                                          Freier SM,
                                                                                                              WPI; 2004-430923/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
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modified_base
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                                                                          Gaarde W,
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ADP49202;
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nucleic
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                                                                                                                       The present invention relates to antisense compounds targeted to a mucleic acid encoding human/mouse checkpoint kinase 1 (Chk1). The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of Chk1. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methyloytosine. The antisense oligonucleotides are useful for the treatment of diseases such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mouse; forkhead box O1A; ss; antisense oligonucleotide;
hossphorothioate linkage; 2.-O-methoxyethyl sugar moiety;
5-methylcytosine; hyperproliferative disorder; cancer; rhabdomyosarcoma;
type 2 diabetes; cytostatic; antidiabetic.
                                                       New compounds, particularly oligonucleotides targeted to a nucleic acid encoding checkpoint kinase 1, useful for treating diseases associated with checkpoint kinase 1, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New compounds, particularly antisense oligonucleotides, targeted to a
                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                    hyperproliferative disorders, e.g. cancer. The present sequence represents an antisense oligonucleotide used in the examples of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shutter JR;
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                                                                                                                                                                                                                                                                                                 Seguence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
             Watt AT;
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                                                                                                  Example 16; SEQ ID NO 85; 66pp; English
           Dobie KW,
                                                                                                                                                                                                                                                                                                                                                                   1031 CTGACTTTGGCCTGGC 1046
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                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 93.8
Matches 15; Conservative
           Freier SM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-389194/36
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                                                                                                                                                                                                                                                                           present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JS2004097459-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
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           Saarde W,
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encoding the human forkhead box 01A polypeptide. The compound is an antisense oligonuclectide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylottosine. The antisense compounds are useful for modulating the expression of the human forkhead box 01A hypeptide and in preparation of a composition for treating hyperpricilerative disorders, e.g. cancer, preferably rhabdomyosarcoma, and type 2 diabetes. This sequence represents an antisense oligonucleotide targeted to DNA encoding the mouse forkhead 01A
                                                                                                                                                                                                The invention relates to a compound targeted to a nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Counteracting pathologic change in beta-adrenergic signal transduction pathway, by administering compound capable of inhibiting transforming growth factor-beta (TGF-beta) signaling through TGF-beta receptor, to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         failure;
disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antimicrobial; cardiovascular;
antimicrobial; cardiovascular;
beta-adrenergic signal transduction pathway;
transforming growth transduction pathway;
bronchoconstrictive disease; heart disease; congestive heart failure;
emphysema; chronic bronchitis; chronic obstructive pulmonary disease;
pulmonary edema; cystic fibrosis; occlusive lung disease;
acute respiratory deficiency syndrome; asthma;
radiation-induced injury of lung; lung injury; inhaled toxin; aging;
acid molecule encoding forkhead box OIA, useful for treating
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.4; DB 1; Length 20;
93.8%; Pred. No. 8.1e+02;
lve 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                              Example 18; SEQ ID NO 64; 80pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1383 CGACCTCCTCACCAAG 1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-NOV-2003; 2003WO-US037416.
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18-SEP-2003; 2003US-0504585P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 CGACCTCATCACCAAG 5
                                    cancer, or type 2 diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADP49202 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Feng Y, Higgins LS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          adrenergic receptor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2004048930-A2.
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10017621-381.rng

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The invention relates to a method for counteracting (MI) a pathologic change in the beta-adrenergic signal transduction pathway which involves administering a compound (I) capable of inhibiting transforming growth factor-beta (TGF-beta) signaling through a TGF-beta receptor, to a drenergic signal transduction pathway. (MI) is useful for counteracting a pathologic change in the beta-adrenergic signal transduction pathway (CC apathologic change results in disease or condition pathway, where the pathologic change results in disease or condition pathway, compensed to flung function. The disease or condition is bronchoconstrictive disease or condition is chosen from emphysema, chronic bronchits, chronic obstructive pulmonary disease (CC bronchits, chronic obstructive pulmonary disease), acute respiratory edema, cystic fibrosis (CF), occlusive lung disease, acute respiratory deficiency syndrome (ARDS), asthma, radiation-induced injury of lung, undied toxins, circulating exogenous toxins or aging, and genetic predisposition to impaired lung function. In an example of the invention, counteract pathologic changes in the beta-adrenergic signal transduction changes in the beta-adrenergic signal transduction contract pathologic changes in the beta-adrenergic signal transduction changes the man and partic to be the man and a perfection changes in the perfect on a PCR primer to amplify
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytostatic, Pre-B-cell transformation related gene; PBX; HOX; cancer, HOX heptapeptide region; RT-PCR; primer; ss; HOXA4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; Live 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       the human and rat betal-adrenergic receptor genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seguence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pettengell R, Forraz NPB,
               Example 1; SEQ ID NO 4; 139pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SGEO-) ST GEORGES ENTERPRISES LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOXA4 RT-PCR primer, SEQ ID 58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1315 TACAACTACCCCAAGT 1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-DEC-2003; 2003WO-GB005425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-DEC-2002; 2002GB-00029151.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 TACAACGACCCCAAGT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADQ26572 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 93.8%
....has 15; Conservative
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Use of peptide that impairs Pre-B-cell transformation related gene-dependent regulation of gene transcription by affecting binding to Hox, for treating or preventing disorders involving aberrant cell division,

Example 4; SEQ ID NO 58; 113pp; English

especially cancer.

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transformation relates to peptides which impair Pre-B-cell transformation related gene (PBX)-dependent regulation of gene transcription, since they mimic the region of HOX to which PBX binds and act as antagonists of that binding. The peptides are based on the hexapeptide region of HOXB-4 but have been found to have cross-reactivity and reduce the binding of PBX to all HOX proteins. The peptides are act useful for manufacturing a medicament for the treatment or prevention of peptides also further comprise a cell penetration moiety that is linked peptides also further comprise a cell penetration moiety that is linked confirmation the side effects of a cyctoxic or chemotherapeutic agent, or for maintaining or expanding a stem cell population in vivo. The stem cells, which are originally derived from the recipient or individual, may be used in manufacturing a medicament for the treatment or prevention of a condition resulting in a decreased level of stem cells, such as a condition resulting from chemotherapy or radiotherapy.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The DNA sequences (AAQ50623-28) are obtained by extracting RNA from liver or serum of a patient or chimpanzee infected with NANBHY, synthesising cDNA and detecting the gene fragment which is negative to anti-HCV antibody and cloning the fragment. The derived proteins (AAR44404-08) can be used to detect NANBHY. The DNA and protein are useful in the treatment or prophylaxis of non-A, non-B hepatitis. The primers (AAQ50629-30) are used in the amplification process
                                                                                                                                                                                                                                                                                                                         The present sequence is a RT-PCR which was used in an example from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis virus gene for corresp. polypeptide - used in treatment a prophylaxis of non-A, non-B-hepatitis, for encoding specified base
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                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 5 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 5; 11pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (DAUC ) DAIICHI KAGAKU YAKUHIN KK.
(DAUC ) DAIICHI PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 131 GGATGAAGAAGATCAA 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92JP-00088840.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGATGAAGAAGATCCA 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                        93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ50630 standard; DNA; 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aminoacid sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NANBHV primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JP05284969-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-NOV-1993.
                                                                                                                                                                                                                                                                                                                                               invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ50630;
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BP.

(first entry)

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1158 GTGGGGTGTGGGCTGC 1173
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Gaps

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93.8%;

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Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
polymorphism; vascular disease; coronary artery disease; forensics;
myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
                                                                                                          Human gene single nucleotide polymorphism #1665.
                            AAF96904 standard; DNA; 21
                                                                                 06-JUN-2001
                                                                                                                                                                                                                                                  Variation
                                                       AAF96904;
  RESULT 830
                 AAF96904
                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequences shown in AAV57601 to AAV57686 represent primers used for the PCR amplification of the exons of the different submits of the human pepthedial sodium channel (ENAC) gene. This is used in the method of the invention of determining the presence or absence of a mutation conferring a pathological condition mediated by altered ion transport. The method comprises analysing a nucleic acid sample, or protein sample, for the presence of a mutation in the ENAC gene, or in its encoded protein. A vector containing a nucleic acid encoding a human altered variant of the ENAC protein can be used to transform host cells to produce an altered variant of an ENAC protein. The protein can be used to identify agents that effect ion transport. The agonists can be used to treat pathological conditions resulting from abnormal ion transport, such as water retention, increased blood pressure, chronic respiratory and metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Determination of presence of mutation conferring pathological condition mediated by altered ion transport - comprises analysing sample for presence of mutation of potassium ion channel gene, ENaC, or in its
                             Gaps
                                                                                                                                                                                                                                                               Epithelial sodium channel; ENaC; mutation; pathological condition; ion transport; water retention; blood pressure; metabolic acidosis; chronic respiratory disease; inflammation; human; PCR primer; ss.
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0
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Pred. No. 8.4e+02;
0; Mismatches 1; Indels
 Length 21;
                            1; Indels
                                                                                                                                                                                                                                       Exon 5 of an ENaC subunit amplifying forward primer B-6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 3 A; 14 C; 2 G; 2 T; 0 U; 0 Other;
0.8%; Score 14.4; DB 1;
93.8%; Pred. No. 8.4e+02;
iive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rossier BC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 38; 56pp; English.
                                                       883 TGTGGGAACATCATCA 898
                                                                                                                                                                                                                                                                                                                                                                                                                  98WO-US004681.
                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0040171P.
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                                                                                 17 TGTGGGAACTTCATCA 2
                                                                                                                                                    AAV57643 standard; DNA; 21
                                                                                                                                                                                                          27-NOV-1998 (first entry)
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Query Match 0.8%
Best Local Similarity 93.8%
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 0.8
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chang SS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-506740/43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UYYA ) UNIV YALE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              encoded protein
                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                              WO9840516-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                   11-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                        17-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lifton RP,
                                                                                                                                                                                                                                                                                                                      Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                    /standard name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .<u>.</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lander ES, Gargill M, Ireland JS, Bolk S,
pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example; Page 160; 242pp; English.
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                                                                                                                                                replace (11,G)
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16-AUG-2000; 2000US-0225724P.
                                                                                                                                                                                                                                                                                                                                                                                   07-SEP-2000; 2000WO-US024503.
                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0153357P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MILL-) MILLENNIUM PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  849 CCTGGACAAGGACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 15; Conservative
                                                                                                                                                                                  *tag=
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       atherosclerosis.
                                                                                                                                                                                                                                                                   WO200118250-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                   LO-SEP-1999;
                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                      15-MAR-2001.
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ID AAI
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24-OCT-2002 AAI73045;

(first entry)

Frosty forward primer.

Gene; frosty; 7 transmembrane family; GPCR64; fetal liver; placenta; testes; uterus; vaccine; allergy; infection; Parkinson's disease; human immunodeficitency virus; HIV-1; HIV-2; pain; cancer; diabetes; obesity; anorexia; bulimia; asthma; migraine; vomiting; anxiety; PCR; acute heart failure; hypotension; hypertension; urinary retention; osteoporosis; angina pectoris; myocardial infarction; stroke; ulcer; benign prostatic hypertrophy; Gilles dela Tourette's syndrome; primer; schizophrenia; manic depression; delirium; dementia; mental retardation; dyskinesia; Huntington's disease; ss.

US2002064830-A1.

30-MAY-2002

22-JUN-2001; 2001US-00887377.

28-JUN-2000; 2000US-0214355P.

ALI S. HILL J. VAWTER L. (ALIS/) (HILL/)

(VAWT/)

Vawter L; Hill J, Ali S,

WPI; 2002-573695/61.

New frosty polypeptide, a member of 7 transmembrane family of polypeptides and encoding polynucleotide, useful for diagnosing and treating infections, cancer, diabetes, osteoporosis, psychotic and neurological disorders.

Example 8; Page 12; 17pp; English.

The sequences given in AA173045-47 are primers and a probe which were used in TagMan analysis of frosty mRNA. Frosty is a member of the 7 cransmenbrane family of polypeptides and shows homology with ApCRGA.

Frosty is expressed in fetal liver, placenta, testes and uterus. Frosty and the corresponding cDNA are useful as vaccines. Frosty and frosty cDNA are also useful in the diagnossis and treatment of human diseases including allergies, infections such as bacterial, fungal, protozoan, and viral infections, particularly infections caused by human diseases including allergies, bulminia, asthma, Parkinson's disease, diabetes, obesity, anorexia, bulminia, asthma, Parkinson's disease, acute heart failure, hypotension, hypertension, urinary retention, osteoporosis, obesity, anorexia, pulminia, asthma, parkinson's disease, benign prostatic failure, hypotension, womiting, psychotic and neurological disorders including anxiety, schizophrenia, mainc depression, delixium, dementia, severe mental retardation and dyskinesias, such as Huntington's disease or Gilles dela Tourette's syndrome. They are also useful for identifying compounds that may be agonists or antagonists which are also useful in the reapportied for the polypeptide. The antibodies are useful to isolate or to identify the clones expressing the polypeptide or to purify the employed to treat diseases. Frosty is also useful to identify membrane compound or soluble receptor. Frosty is also useful for creating transgenic bound or soluble receptor. Frosty on also useful for membrane controlled and may be also useful so also useful second and knock-out animals, and for chromosome localization studies

Sequence 21 BP; 8 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

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                                      Gaps
                                        .
0
0.8%; Score 14.4; DB 1; Length 21; 93.8%; Pred. No. 8.4e+02; cive 0; Mismatches 1; Indels
 Query Match 0.8
Best Local Similarity 93.8
Matches 15; Conservative
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20 956 ACCGGCAGAAGGTGCT 5 ACCGGAAGAAGGTGCT

g

RESULT 832 ABK65706

В. ABK65706 standard; DNA; 21

ABK65706;

(first entry) 02-JUL-2002

Human single nucleotide polymorphism #326.

agammaglobulinaemia, diabetes insipidus; Lesch-Nyhan syndrome; muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease; familial hypercholesterolaemia; polycystic kidney disease; cancer; hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis; hereditary haemorrhagic telangiectasia; familial colonic polyposis; Bilers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; inflammation; nervous system disorder; infection; rheumatoid arthritis; multiple sclerosis; diabetes; systemic lupus erythematosus; Graves disease; longevity; obesity; baldness; fertility; forensic; paternity testing; ss. Human; single nucleotide polymorphism; SNP; sickle cell anaemia;

Homo sapiens.

US2002037508-A1.

28-MAR-2002.

18-JAN-2001; 2001US-00765081

19-JAN-2000; 2000US-0176861P

(CARG/) CARGILL M. (IREL/) IRELAND J S (LAND/) LANDER E S.

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Lander ES; Cargill M, Ireland JS,

WPI; 2002-315108/35

Nucleic acid comprising single nucleotide polymorphisms, useful in forensics, paternity testing and diagnosis of disease.

Claim 1; Page 77; 96pp; English.

The invention relates to a nucleic acid comprising single nucleotide polymorphisms (SNPs) associated with diseases. The nucleic acids comprising the SNPs and probes and primers for detecting them may be used in assays for the diagnosis of diseases associated with SNPs (such as sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial hypercholesterolaemia, polycystic kidney disease, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Damios component is or may be genetic, and acute intermittent porphyria, symptoms of, or susceptibility to, multifactorial diseases of which a component is or may be genetic, such as autoimmune diseases.

C inflammation, cancer, diseases of the nervous system, and infection by pathogenic microorganisms, autoimmune diseases including rheumatoid arthritis, multiple sclerosis, diabetes (insilin-dependent and non-contractive diseases). independent), systemic lupus erythematosus and Graves disease, cancers including cancers of the bladder, brain, breast, colon, oesophagus, kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate, skin, stomach and uterus, longevity, appearance (e.g., baldness, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments), in forensics and in paternity testing. ABK65381-ABK65841 represent human single nucleotide polymorphisms of the invention

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xylanase (xynA) transcriptional regulatory sequence operably linked to a heterologous coding sequence. Provided is a method for producing a heterologous protein in Aureobasidium pullulans, by up-regulating the expression of a sequence encoding a heterologous protein by adding xylan or xylose to a medium in which a recombinant A. pullulans cell comprising the new isolated nucleic acid molecule is cultured, where the medium contains glucose at a concentration less than 0.02 % (weight/volume) and a xynA transcription regulatory sequence is operably linked to the sequence encoding the heterologous protein, and the heterologous protein is expressed. The nucleic acid containing a signal peptide-encoding sequence, is useful for efficient and economical secreted expression of a protein of interest in a eukaryotic cell, especially a fungal cell such as Aureobasidium pullulans. It may be used as a probe. The proteins produced are widely used in pharmaceutical, food, chemical and other industries. The present sequence represents a PCR primer for amplifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated nucleic acid encoding a signal peptide for efficient and economical secreted expression of a protein of interest in a eukaryotic cell, widely used in pharmaceutical, food and chemical industries.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an isolated nucleic acid molecule comprising a
                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                          Xylanase; xynA; transcriptional regulation; xylan; xylose; enzyme;
fungal; pharmaceutical; food; chemical; PCR primer; ss.
                                                                                           .
                                                      Length 21;
                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                      A. pullulans xynA locus DNA amplifying primer APXR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the nucleotide sequence of A. pullulans xynA locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21 BP; 4 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
                Sequence 21 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 1 Other;
                                                    Score 14.4; DB 1;
Pred. No. 8.4e+02;
                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYGE-) UNIV GEORGIA RES FOUND INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 28; 43pp; English.
                                                                                       1;
                                                                                                                                 886 GGGAACATCATCAACATG 903
                                                                                                                                                                   2 GGGAACAGCMTCCACATG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JUN-2000; 2000US-00595344.
                                                    0.8%;
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                                                                                                                                                                                                                                                                     ABA94579 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                               09-APR-2002 (first entry)
                                                                    Local Similarity 83.3 es 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aureobasidium pullulans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Li X, Ljungdahl LG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-130735/17.
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                                                                                                                                                                                                                                                                                                           ABA94579;
                                                      Query Match
                                                                                                                                                                                                                              RESULT 833
                                                                                         Matches
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Human, ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;

Cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;

Cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;

Advengic receptor beta1; ADBR1; aryl bydrocarbon, ARR; MRR2; NRI2;

W advendase 2; COX2; diazepam binding inhibitor; DB1; haematological;

CYClooxgenase 2; COX2; diazepam binding inhibitor; DB1; haematological;

CYClooxgenase 2; COX2; diazepam binding inhibitor; DB1; haematological;

CYCLOOXGENASE 2; EPHX2; 5-lipoxygenase activating protein; FLAP;

CYCLOOXGENASE 2; EPHX2; 5-lipoxygenase activating protein; FLAP;

CYCLOOXGENASE 2; EPHX2; 5-lipoxygenase activating protein; FLAP;

CYCLOOXGENASE 2; COX2; diazepam binding inhibitor; DNCatan;

CYCLOOXGENASE 2; COX2; diazepam binding inhibitors protein; FLAP;

CYCLOOXGENASE 2; COX2; diazepam binding inhibitor; DNCatanse 2; NOC2; sulfotransferase; NNMT;

CYCLOOXGENASE 2; COX2; diazepam binding inhibitors receptor;

CYCLOOXGENASE 2; COX2; diazepam binding inhibitors inmunological; SNP;

CCOXIGNASE 2; COX2; diazepam binding inhibitors 2; CYCLOOXGENES; CHMR3; CHMR3; CHMR4; CHMR5;

CATANT; Addition metabolism; cardiovascular function; colorectal tumour;

COXIGNASE 2; CXCLOOXGENESE 2; CATANT; CATANT; CHMR5; CHMR5;

CATANT; CATANT; CATANT; CHMR1; CHMR5; CHMR5;

CATANT; CATANT; CATANT; CATANT; CHMR5;

CATANT; CATANT; CATANT; CATANT; CHMR5;

CATANT; CATANT; CATANT; CATANT;

CATANT; CATANT; CATANT;

CHMR5; CHMR5;

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                                                                                                                                                                                                                                                               Human multidrug resistance gene polymorphic sequence #31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single nucleotide polymorphism.
                                                                                                                 ABS98129 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-NOV-2001; 2001WO-US044838.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-NOV-2000; 2000US-00724389.
2 CACTCAGCTCGGCACC 17
                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                  23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-JUL-2002.
                                                                                                                                                                 ABS98129;
                                                                    RESULT 83
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WPI; 2002-698522/75. Guida M, Hall J;

Isolated nucleic acid molecules having polymorphisms in known human genes eg. cytochrome py50 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for disorder-related traits.

Example 22; Page 144; 714pp; English.

This invention relates to the sequence of an isolated nucleic acid
molecule comprising at least one base variation from that of a known
than eytcohrome P450 al (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
cytochrome P450 02B1 (CYP45002B1), adrenergic receptor betal (ABBR1),
aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
(ARNY), cathepsin S (CYSS), cyclooxgenase 2 (COX2), diazepam binding
inhibitor (BBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
cytochin (FLAPP), glutathione-S-transferase 12 (GST12), histenanine-N-methyl
cytochin (FLAPP), glutathione-S-transferase 12 (GST12), histenanine-N-methyl
cytochin (FLAPP), urbinale (STM), UDP-glucuronosyl
cytochin (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
cytransferase (UGT2B1S), urokinase receptor (UGT2B7), UDP-glucuronosyl
cytransferase (UGT2B1S), urokinase receptor (UGT2B7), UDP-glucuronosyl
cytransferase (UGT2B1S), urokinase receptor (URPS), multidrug resistence 1
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated protein 3
cytochin (WDR1), lactotransferin (LTF), multidrug resistence associated

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Gaps

; 0

0.8%; Score 14.4; DB 1; Length 21; 93.8%; Pred. No. 8.48+02; tive 0; Mismatches 1; Indels

CACTCAGCTCTGCACC 323

308

Conservative

Local Similarity nes 15; Conserv

Best Loca Matches

Query Match

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identifying the genes responsible for a variety of disorder-related traits as a result of their e.g., overexpression, constitutive expression, mutation or underexpression, which may be used in diagnosing and/or treating the disorders. The nucleic acid molecules comprising the polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP4502E1, NNMT, NOO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR, MDR1 and/or MDR3 may also be used to screen individuals for altered drug metabolism. The polymorphic sequences contained in CYP4501A1, CYPP4501A2, AHR, MDR1 and/or MDR3 may also be used to screen individuals for susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are used to screen function, in CX2 for altered susceptibility to colorectal tumours, in DB1 or CHMR1 for altered central nervous system function, in FLAP and HNMT for altered pulmonary, inmunological or haematological function, in ILK2 for altered central processes activity in the prostate, in LTF for altered central and processes activity in the prostate, in LTF for altered central and contained central and contained contained central and central central central and central central central central and central central central central and central ce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is that of a 5' primer, which was used with the 3' primer given in ACC58763 for the PCR amplification of the pro-albhal(III) chain. The PCR product was used to prepare a DNA molecule (see ACC58766) encoding a modified pro-alpha chain (see ABR42661) in which decorin replaced the globular domain of the N-propeptide of the pro-alpha(III) chain. This is an example of modified pro-alpha chains of the invention that may form part of a procollagen molecule for incorporation into
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel modified pro-alpha-chain useful for treating wounds and fibrotic disorders, has triple helical forming domain linked to N-terminal domain that contains a polypeptide sequence from proteoglycan protein core.
                                                                                                                                                                                                                                                                                                                                          peripheral nervous system function. The present sequence represents a polymorphic DNA sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Collagen; procollagen; pro-alpha chain; vulnerary; gene therapy; drug delivery; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.4; DB 1; Length 21; 93.8%; Pred. No. 8.4e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 7 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pro-alphal (III) chain 5' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 33; 73pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-OCT-2001; 2001GB-00025369, 23-OCT-2001; 2001GB-00025372.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              52 GCAGTGTGACTGCTGA 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.8
Best Local Similarity 93.8
Matches 15, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bulleid NJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-504991/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003035692-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-AUG-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC58762;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 835
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The invention relates to a novel polynucleotide isolated and purified from a human gene having any one of 935 fully defined sequences as given in specification, or a sequence having a base substitution. The invention further relates to: an oligonucleotide containing single nucleotide polymorphisms; a PCR primer set chosen from the combination of two DNA fragments from any one of 1201 fully defined sequences as given in specification; a labelling probe containing the SNP containing oligo; and a microarray equipped with the SNP containing oligo. The isolated human gene of the invention is useful for detecting the single nucleotide polymorphisms in human gene. The isolated human gene is also useful for diagnosis of disease and determination of side effect to a medical agent. The isolated human gene is also effective in detecting single nucleotide polymorphism in a human gene. This polynucleotide sequence represents one of the PCR primers used in the single nucleotide polymorphism
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collagen polymers, matrices and gels used to treat wounds and fibrotic
                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human; single nucleotide polymorphism; microarray; side effect; ss;
primer; PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Single nucleotide polymorphism detection primer, SEQ ID No 2063.
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                               disorders, in tissue replacement, and in cosmetic treatments
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.4; DB 1; Length 21; 93.8%; Pred. No. 8.4e+02;
                                                                                                                                                  Length 21;
                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
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                                                                                       Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                               0.8%; Score 14.4; DB 1;
13.8%; Pred. No. 8.4e+02;
.ve 0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1165 GIGGCTGCATCTTCT 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                     764 TGCTCAAGGACCTCAA 779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-FEB-2002; 2002JP-00034717.
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                                                                                                                                                                                                                                                                                                                                    TGGTCAAGGACCTCAA 18
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                                                                                                                                                                              93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                            Query Match
Best Local Similarity 93.8
Matches 15; Conservative
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 836
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ADJ13973 standard; DNA; 21 BP

(first entry)

20-MAY-2004

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The present invention relates to a method of determining a genotype associated with increased recreased resistance to familial bipolar affective disorder. The method comprises determining the genotype with at least one marker of at least one chromosomal region linked to a locus chromosomal regions are included of and localised between D45402 and D45424, D45431 and D45404, or D113394 and D11529. The invention also discloses a kit for determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder, where the kit comprises markers for two or more of the chromosomal regions cited. The method and kit are useful for determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder in a family affected by bipolar affective disorder in a family affected by bipolar affective disorder in an affective family member, and for assessing an increased or decreased risk of developing bipolar illness for a tested individual from an affective family. ACA58053.ACA58292 represent primers used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder in a family comprises determining the genotype of e.g., chromosomal regions D4S402 and D4S424.
                                                                                                                                                                                    Human; genotype determination; familial bipolar affective disorder; chromosomal region linked; locus associated with resistance; D4S402; D4S424; D4S431; D4S404; D11S394; D1S29; chromosome marker; primer; ss.
                                                                                                                                                    Human familial bipolar affective disorder chromsome marker primer #24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.4; DB 1; Length 21; 93.8%; Pred. No. 8.4e+02; ative 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure, Page 9; 79pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Paul SM;
                                                                                                                                                                                                                                                                                                                                                                                                                    96US-0014334P.
97US-0062924P.
98US-00175158.
                                    ACA58076 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                  13-JUN-2001; 2001US-00881012
                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ginns EI, Egeland JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GINN/) GINNS E I.
(EGEL/) EGELAND J A.
(PAUL/) PAUL S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-352708/33.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         present invention
                                                                                                                                                                                                                                                                                                          US2002192655-A1
                                                                                                                                                                                                                                                                                                                                                                                                                      29-MAR-1996;
20-OCT-1997;
19-OCT-1998;
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                                                                          ACA58076;
RESULT 837
                    ACA58076,
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This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation partern of a region of the promoter for the tumour suppressor gene p16 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                      probe; ss; chemical modification; methylation; array; CpG island; tumour suppressor; p16; human; H69; H1618.
                                                                                                      Human DNA probe used to immobilise CpG methylated DNA SeqID 1100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               probe; ss; chemical modification; methylation; array; CpG island;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human DNA probe used to immobilise CpG methylated DNA SeqID 1062
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Luebke KJ, Balog RP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; SEQ ID NO 1100; 210pp; English
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                                                                                                                                                                                                                                                                                                          27-JUN-2002; 2002US-00184085.
                                                                                                                                                                                                                                                                                                                                              27-JUN-2001; 2001US-0301370P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sarner HR, Minna JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-874843/81
                                                                                                                                                                                                                                                                                                                                                                                                   (MINN/) MINNA J D.
(LUEB/) LUEBKE K J.
(BALO/) BALOG R P.
                                                                                                                                                                                                                                                                                                                                                                                  (GARN/) GARNER H R.
                                                                                                                                                                                                                                     JS2003152950-A1
                                                                                                                                                                                                   Homo sapiens.
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Gaps

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315 CTCTGCACCAGAGATT 330

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15; Conservative

Matches

18 CTATGCACCAGAGATT

RESULT 838 ADJ13973

DNA

Balog RP

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modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical method for the parallel analysis of many potential sites of chemical medification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines He9 and H1618. This oligonucleocide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                        Analysis of chemical modification of DNA involves obtaining sample of to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.
                                                                                                                                                                                                                                                                                                                                                                                           This invention relates to a novel method for analysing chemically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                probe; ss; chemical modification; methylation; array; CpG island;
tumour suppressor; p16; human; H69; H1618.
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                                                                                                                                                                                                                                                                                                                                              Example 1; SEQ ID NO 1099; 210pp; English.
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                      27-JUN-2001; 2001US-0301370P
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les 15; Conservative
                                                                                                                                                                           Garner HR, Minna JD,
                                                             (GARN/) GARNER H R.
(MINN/) MINNA J D.
(LUEB/) LUEBKE K J.
(BALO/) BALOG R P.
                                                                                                                                                                                                                    WPI; 2003-874843/81.
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LUEBKE K J.
BALOG R P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GARNER H R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-AUG-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention.
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(LUEB/)
(BALO/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene p16 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                       Balog RP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; SEQ ID NO 1062; 210pp; English
tumour suppressor; p16; human; H69; H1618
                                                                                                                                                                                                                                                                                                                                                                       Luebke KJ,
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                                                                                                                                                                                                                                                                                                                                                                       Minna JD,
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                                                                                                                                                                                                                                                                                 (MINN/) MINNA J D.
(LUEB/) LUEBKE K J.
(BALO/) BALOG R P.
                                                                                                                                                                                                                                                               GARNER H R.
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                                             Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                     HR,
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Matches
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This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagence that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                   Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in
                                                                                                                                                                                                                                different base sequences, and determining sequence of resulting DNA.
                                                                                                                                                                                                                                                                                                                                                      Example 1; SEQ ID NO 1102; 210pp; English
WPI; 2003-874843/81.
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Gaps ., 0.8%; Score 14.4; DB 1; Length 21; 93.8%; Pred. No. 8.4e+02; ative 0; Mismatches 1; Indels Seguence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other; 555 CCTCAGCCGCCGCCTC 570 CCTCAGCCGCCGCCC 17 15; Conservative Query Match Best Local Similarity à g

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ADJ13976 standard; DNA; 21 BP 20-MAY-2004 (first entry) probe; umour RESULT 842 ADJ13976

ss; chemical modification; methylation; array; CpG island; suppressor; pl6; human; H69; H1618. Human DNA probe used to immobilise CpG methylated DNA SeqID 1103. JS2003152950-A1 Homo sapiens

27-JUN-2002; 2002US-00184085 14-AUG-2003

27-JUN-2001; 2001US-0301370P (GARN/) GARNER H R.

MINNA J D. LUEBKE K J. BALOG R P. (MINN/) (LUEB/) (BALO/) Garner HR, Minna JD,

Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA. WPI; 2003-874843/81.

Luebke KJ, Balog RP;

Example 1; SEQ ID NO 1103; 210pp; English

different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In

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This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Analysis of chemical modification of DNA involves obtaining sample of DNA
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                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human DNA probe used to immobilise CpG methylated DNA SeqID 1065.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       probe; ss; chemical modification; methylation; array; CpG island;
tumour suppressor; p16; human; H69; H1618.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                to be analyzed, treating DNA with chemical reagents that result different base sequences, and determining sequence of resulting
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                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 2 A; 13 C; 3 G; 3 T; 0 U; 0 Other;
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LUEBKE K J.
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                                                                                                                                                                                                                                                                nvention.
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Primer of the invention #2747.
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particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
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33.8%; Pred. No. 8.4e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                           human; single nucleotide polymorphism; SNP; ss; primer.
                                                            Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
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Matches 15; Conservative
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ADK97027/c
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tumour;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel polynucleotide useful for PCR amplification along with two DNA fragment from another set of sequences, or for detecting single nucleotide polymorphism in human gene.
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PNET; breakpoint locus; Wilms' tumour;
desmoplastic small round cell tumour; DSRC tumour; PCR primer; ss.
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human; single nucleotide polymorphism; SNP; ss; primer.
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Matches 15; Conservative
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Diagnosis of desmoplastic small round cell tumours - by detecting nucleic acid encoding chimetic EWS-WT1 nrotain
                                                                                                               transcriptase PCR), and probes for the detection of DNA encoding a chimeric Ewing's sarcoma (EWS)-WT1 protein. EWS is also known as peripherah neuroeccodermal tumour (PMET). WT1 was screened as a breakpoint locus because of its involvement in Wilms' tumour, which shares some histopathologic features of desmoplastic small round cell (DSRC) tumours. The EWS-WT1 chimeric transcript has been detected in 11 out of 12 DSRC tumours studied and in none of 49 other tumours. DSRC tumours are associated with translocation of the EWS gene. The present oligonucleotide is complementary to the WT1 intron 5' to exon 7, and is used in a method for the diagnosis of DSRC tumours in patients. The method comprises detecting a nucleic acid molecule encoding a chimeric EWS-WT1 protein in a sample from the subject, where positive detection indicates the presence of a DSRC tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Polymorphism; biallelic; human; forensic; paternity testing; disease; detection; phenotypia; characteristic; infection; hereditary; autoimmune disease; cancer; inflammation; drug; therapy; medicament; treatment; marker; primer; ss.
                                                                                                      Oligonucleotides AAT97852-68 are used both as PCR primers (in reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated nucleic acid segments from the human genome - used for determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 15; Page 47; 310pp; English.
                                                                  Disclosure; Col 29; 34pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1697 CTTACTCTCCCTAC 1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hudson T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX09130 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97WO-US020313.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96US-0030455P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7 crracrerereceses 22
                                                                                                                                                                                                                                                                                                                                                                                                                            93.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-MAR-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                            15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wang D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-286974/25.
                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9820165-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lander ES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX09130;
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 847
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isolation of various biallelic polymorphic markers found in the human genome (represented in AAX10269-X12937). These primers can be used in a method for determining polymorphic forms in an individual for use in e.g.

AAX09121-X10268 are allele-specific oligonucleotide primers used in the

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Gaps

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forensics, paternity testing or for phenotypic typing for diseases such as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, *Miskott-Andrich syndrome, *Rabry's disease, familial hypercholesterolemia, polycystic kidney disease, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous system, infection by pathogenic microorganisms, and characteristics such as longevity, appearance (e.g. baldhess, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Reverse and forward (AAV32817) primers were used to amplify the Staphylococcus aureus pcp34 gene. The PCR product was used as a probe in the method of the invention. The invention provides a method of differentiating clinical isolates of S. aureus in isolated genomic DNA samples. The method involves digesting the samples with a restriction enzyme followed by southern blot hybridisation, using DNA probes selected from at least two S. aureus genes, to produce a hybridisation profile which is capable of differentiating S. aureus clinical isolates. The S. aureus genes used as genotypic markers were the collagen adhesin (cna)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       collagen adhesin gene; cna; primer; PCR; amplification; cnaB; cna-up gene; fibronectin binding protein A gene; fnbA; fnbB; beta-toxin; pcp gene; pcp12 gene; pcp34 gene; hlb; biotyping; southern blot hybridisation; insertion sequence typing;

    uses Southern

                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Differentiating clinical Staphylococcus aureus strains - uses South
blot probes for specific genes that determine genomic organisation.
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0
                                                                                                                                                                                                                                                                                                                                          Length 22;
                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Reverse primer for Staphylococcus aureus pcp34 gene.
                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 9 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                          Score 14.4; DB 1;
Pred. No. 8.7e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 8; Fig 7; 25pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                          1457 TCTTCCTCAGTCTGGG 1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV32818 standard; DNA; 22 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96US-00667079.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          plasmid profile analysis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96US-00667079
                                                                                                                                                                                                                                                                  prophylaxis of such diseases
                                                                                                                                                                                                                                                                                                                                                0.8%;
                                                                                                                                                                                                                                                                                                                                                            93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 TCTTCCTCAGTCTGTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                          Query Match 0.8
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    aureus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYAR-) UNIV ARKANSAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-446070/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            blot probes for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-OCT-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Smeltzer MS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-AUG-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV32818;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV32818
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Matches
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ADB80421
               ACC82981
                                         g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Characterizing increased dedifferentiation of cancer cells useful for diagnosing cancer, particularly early cervical cancer, comprises applying body fluids to a foil covered slide and detecting dye-marked cells by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention describes a novel method for characterizing increased dedifferentiation and micro-metastasis of cancer cells, comprising applying body fluid cells to a carrier and cytodiagnostically examining its cells using micro-dissection to separate cytodiagnostically distinguishable cells from normal cells and performing at least one analysis on the separated cells. The method is used to diagnose cancer,
gene, cnaB gene, cna-up gene, fibronectin binding protein A (fnbA) gene, fnbB gene, beta-toxin (hlb) gene, pcp gene, pcp12 gene and the pcp34 gene. This polymorphic based genetic identification method has proved more specific in identifying epidemiologically related strains than, previous techniques, including polymerase chain reaction, biotyping, insertion sequence typing and plasmid profile analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   particularly for the early recognition of cervical carcinoma. This sequence represents a PCR primer used in the amplification of the human Papilloma virus E6 gene used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                             PCR primer; E6; dedifferentiation; micro-metastasis; cancer cell; cytodiagnostic; cervical carcinoma; ss.
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0
                                                                                                                     0.8%; Score 14.4; DB 1; Length 22; 33.8%; Pred. No. 8.7e+02; Ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.4; DB 1; Length 22;
93.8%; Pred. No. 8.7e+02;
lve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22 BP; 5 A; 11 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                             Sequence 22 BP; 8 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                     Human papilloma virus E6 PCR primer 33ME51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 2; Page 14; 18pp; German.
                                                                                                                                                                            1306 TTCAAGACATACAACT 1321
                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-FEB-2000; 2000DE-01009081.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-FEB-2001; 2001DE-01009259
                                                                                                                                                                                                   rccaagacaracaacr 20
                                                                                                                                ilarity 93.8%;
Conservative
                                                                                                                                                                                                                                                                    AAH49379 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-607957/70
                                                                                                                                   Local Similarity
es 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GIES/) GIESING M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                DE10109259-A1.
                                                                                                                                                                                                                                                                                                                          30-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-SEP-2001
                                                                                                                                                                                                                                                                                                AAH49379;
                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                             RESULT 849
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The invention relates to molecules comprising HIV-1 subtype isolate regulatory/accessory genes (tat, nef and rev genes) and modifications and derivatives thereof. The invention also provides proteins encoded by such genes. Sequences of the invention are useful for manufacturing vaccines for treating or preventing human immunodeficiency virus (HIV) infections. They are also useful in gene therapy. The present sequence is a PCR primer used to sequence HIV-1 tat gene. Note: This sequence is a pcr be the same as that shown as SEQ ID NO. 23 in sequence listing. However this sequence has an additional base at its 3' end. (Updated on 27-OCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      comprising HIV-1 subtype isolate regulatory/accessory for manufacturing a vaccine for treating or preventing HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ss; primer; antiinflammatory; antiasthmatic; antiallergic; CLCA1; calcium activated chloride channel protein; chest disorder; airway disorder; chronic obstructive lung disease; chronic bronchils; bronchial asthma; rhinitis; hay fever; pneumonia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                        cy gene; accessory gene; HIV; human immunodeficiency virus;
infection; gene therapy; tat; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 22;
                                                                                                                                                                       Outer reverse PCR primer used to sequence HIV-1 tat gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bourn W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 22 BP; 5 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.4; DB 1;
33.8%; Pred. No. 8.7e+02;
Ive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Williamson C, Van Harmelen JH, Gray CM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOUTH AFRICAN MEDICAL RES COUNCIL. UNIV CAPE TOWN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 20; 97pp; English.
                                                                                                                                                                                                                                                                                             Human immunodeficiency virus 1.
BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rat CLCAl gene PCR primer #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                           31-OCT-2002; 2002WO-IB004550.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 CCTCAATATCCCCATC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-OCT-2001; 2001ZA-00008978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93.8%;
ACC82981 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADB80421 standard; DNA; 22
                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15; Conservative
                                                                                                 (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-430497/40.
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                                                                                                                                                                                                                                                                                                                                                WO2003037919-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New molecules
genes, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-2003
                                                                                                                      27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-2003
                                                                                               27-OCT-2003
                                                                                                                                                                                                                     Regulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    infection
                                              ACC82981;
                                                                                                                                                                                                                                               vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADB80421;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SAME-)
(UYCA-)
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771 GGACCTCAAACACGCC

Best Local Similarity 93.8%; Matches 15; Conservative

3 GGACCTCCAACACGCC 18

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10017621-381.rng

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The present invention describes a method for determining a genetic alteration in a nucleic acid for the diagnosis and management of amalganat disease. The method comprises providing a target nucleic acid from a patient sample, the target nucleic acid having a predetermined sequence in the normal population; and assessing the target nucleic acid for the extent of loss of heteroxygosity relative to predetermined loci, an increased loss of heteroxygosity relative to predetermined loci, an increased loss of heteroxygosity being correlated with enhanced tumour invasiveness and metastasis. Also described is a method for determining the presence or absence of at least one specific nucleotide in a target mucleic acid for the diagnosis and management of malignant diseases. The methods are useful in detecting genetic alterations (e.g. single nucleotide polymorphisms (SNPs)) in a defined polymucleotide region as a means to diagnose and manage malignant diseases such as cancer. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rat airway epithelial cell line NIM-1 expressing a calcium-activated chloride channel protein for screening chloride channel inhibitors as agents for treatment of respiratory disease including chronic obstructive
                                                                        genetic alterations associated with cancer comprises providing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rat; airway epithelial cell; calcium-activated chloride channel; CLCA; antiasthmatic; antiallergic; antiinflammatory; respiratory disorder; chronic obstructive lung disease; asthma; hayfever; cystic fibrosis; pulmonary fibrosis; pneumonia; primer; ss; RT-PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present sequence represents a PCR primer used to amplify genomic DNA corresponding to known SNPs located in predetermined regions of human chromosome 1, which is used in an example from the present invention.
                                                                                                    a target nucleic acid from a patient sample having a predetermined sequence in the normal population, and assessing the nucleic acid for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.4; DB 1; Length 22; 33.8%; Pred. No. 8.7e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 22 BP; 8 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rat CLCA1 RT- PCR primer 1 SEQ ID NO:10.
                                                                                                                                                                                                               Example 1; SEQ ID NO 219; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nakanishi A, Iwashita H, Morita S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              402 GCAGTCTCCAGTGAGA 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-JUL-2003; 2003WO-JP008486.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGTCTCCAGTGAGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TAKE ) TAKEDA CHEM IND LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADI29505 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lung disease and asthma
                                                                                                                                                       .oss of heterozygosity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-108820/11.
                      WPI; 2004-071731/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-JAN-2004.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADI29505;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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PART OF THE STANDARD CONTRACTOR STANDARD CONTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to proteins and their salts and partial peptides which are the expression product of the rat CLCAl gene or are related proteins with similar activity. CLCAl is a calcium activated chloride channel protein. The proteins are useful for the treatment, prevention and diagnosis of chest and airway disorders including chronic obstructive lung disease, chronic bronchitis, bronchial asthma, chronic rhinitis, acute rhinitis, allergic rhinitis, hay fever and pneumonia. This sequence corresponds to a PCR primer used to isolate and clone the rat CLCAl gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rat CLCAl gene and protein encoded by it useful for screening inhibitors of its activity and expression and as chronic obstructive lung disease and bronchial asthma remedies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               genetic alteration; diagnosis; malignant disease; tumour; metastasis; single nucleotide polymorphism; SNP; cancer; PCR primer; detection; human; chromosome 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 22 BP; 6 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 2; Page 97; 115pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human chromosome 1 SNP PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Maris JM, Gelfand CA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  672 AAGCAAGCTCACAGAC 687
                                                                                                                                                                                                                                        02-NOV-2001; 2001JP-00337864.
13-DEC-2001; 2001JP-00380099.
18-JAN-2002; 2002JP-00010035.
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                                                                                                                                                                                   01-NOV-2002; 2002WO-JP011417.
                                                                                                                                                                                                                                                                                                                                                  (TAKE ) TAKEDA CHEM IND LID.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-MAR-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                       Wakanishi A, Morita S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-430500/40.
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                                                                              WO2003037927-A1
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                                                                                                                                   38-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ADB80434)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                           Rattus sp.
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Gaps

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Query Match
Best Local Similarity
Matches 15; Conserv
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13-MAR-1996
                                                                                                                                                                                                                                                        Mouse kank
                                                                                                                                                                                              ADO59314;
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                                                                                                                                      RESULT 855
                                                                                                                                                   AD059314/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention relates to a method of designing an antisense compound. The method includes extracting the all-RNA fraction from a cell, incubated with or without the oligomucleotide, and analysing the difference in expression of the gene output to ascertain whether an oligomucleotide produces an antisense effect against the target gene. The method may be useful for the production of compounds with an antianglogenic activity acting as enhancers of vasopermeability whilst the disclosed sequences may be used for antisense therapy. The compounds developed may be used to treat or prevent anglogenesis. The method can be carried out to reduce expression of a target gene without affecting other related to the method of the invention. Note: This sequence does not appear in the specification but was obtained in electronic format from the Japanese patent office.
                                         The invention relates to novel rat airway epithelial cell lines expressing a calcium-activated chloride channel protein (CLCA). A cell line of the invention has antiasthmatic, antiallergic, and antiinflammatory activity. The invention is useful for the treatment and prevention of respiratory disorders, including chronic obstructive lung disease, asthma (including chronic and acute asthma and allergic asthma), hayfever, cystic fibrosis, pulmonary fibrosis and pneumonia. The present sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Designing antisense compound, by inputting oligonucleotide with antisense effect to target gene, extracting RNA, analyzing gene expression,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antisense compound, all-RNA fraction, expression, antisense effect, antiangiogenic, vasopermeability, antisense therapy; angiogenesis; ss.
                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    effect to target gene, extracting RNA, analyzing gene expression, modifying oligonucleotide to produce antisense effect.
                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                         0.8%; Score 14.4; DB 1; Length 22; 33.8%; Pred. No. 8.7e+02; ve. 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense compound design-related oligonucleotide SeqID17.
                                                                                                                                                                             Sequence 22 BP; 6 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 17; 67pp; Japanese.
               Example 3; SEQ ID NO 10; 140pp; Japanese.
                                                                                                                                                                                                                                                                    672 AAGCAAGCTCACAGAC 687
                                                                                                                                                                                                                                                                                                                                                                            ADP18593 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-AUG-2003; 2003JP-00291071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-AUG-2002; 2002JP-00235849
                                                                                                                                                                                                                                                                                                 AAGCGAGCTCACAGAC 18
                                                                                                                                                                                                                          93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                        15; Conservative
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                                                                                                                                                                                                                         Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JUL-2004
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                                                                                                                                                                                                                                                                                                                                                                                                        ADP18593;
                                                                                                                                                                                                           Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention comprises the amino acid and coding sequence of the mouse kank (mkank) profein. The DNA and protein sequences of the invention are useful in the detection and treatment of cancer. The present DNA sequence represents a PCR primer for the mouse kank gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis; intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
                                               Gaps
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Length 22;
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                                          1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                 mouse; murine; kank; mkank; cancer; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 22 BP; 4 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
  0.8%; Score 14.4; DB 1;
93.8%; Pred. No. 8.7e+02;
iive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                      (mkank) gene-specific PCR primer #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
(INFO-) INFO GENES CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CMV antisense oligonucleotide (ISIS 5481).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; SEQ ID NO 11; 83pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         drug discovery for treating cancer.
                                                                                       1025 AGCTGGCTGACTTTGG 1040
                                                                                                                                                                                                                                          BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-NOV-2002; 2002JP-00339909
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                                                                                                                            Adcridecricacerroe 5
                                                                                                                                                                                                                                        ADO59314 standard; DNA; 22
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(first entry)
                                                                                                                                                                                                                                                                                                                              (first entry)
                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15; Conservative
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10017621-381.rng

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Antisense ONS targeting CMV DNA or RNA coding for the IB1, IE2 or DNA polymerase proteins have been shown to be effective in therapy, prophylaxis and diagnosis of CMV infection. The ONS may be modified to reduce nuclease resistance and to increase their efficacy. Modifications moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                          New oligo-nucleotide inhibits cytomegalovirus replication - by binding to a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of CMV diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis; intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.4e+02;
ative 0; Mismatches 3; Indels
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"phosphorothioate backbone"
                                                   /*tag= a
/note= "phosphorothioate backbone"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CMV antisense oligonucleotide (ISIS 4376)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cocation/Qualifiers
                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                               Example 10; Col 17; 66pp; English.
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                                                                                                                                                                                                                     Draper K, Anderson
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                                                                                                                                           93US-00009263
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Best Local Similarity 84.2'
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/note= '
                                              /*tag=
                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
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modified_base
                          Key
modified base
                                                                                                                                           25-JAN-1993;
                                                                                                                                                                     19-NOV-1992;
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                                                                                        JS5442049-A
                                                                                                                  15-AUG-1995
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Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT11971;
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                                                                                                                                                                                                                        Baker B,
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                                                                                                                                                                     New oligo-nucleotide inhibits cytomegalovirus replication - by binding to a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of CMV diseases.
                                                                                                                                                                                                                                                                           cytomegalovirus (CMV) that displayed activities of at least 50 % of control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal mismatches could be tolerated without loss of antiviral activity. ISIS 4376 is a 19-mer antisense ON related to ISIS 2292, but with one nucleotide removed from each end. Antisense ONS targeting CMV DNA or RNA coding for the IEI, IEZ or DNA polymerase proteins have been shown to be effective in therapy, prophylaxis and diagnosis of CMV infection. The ONS may be modified to reduce nuclease resistance and to increase their efficacy. Modifications include phosphorothicate backbones, alkyl and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="at least one (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently
                                                                                                                                                                                                                                                                                                                                                                                                                   halogen substituted sugar moieties at the 2' position. (Updated on 25-MAR -2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                AATI1971-84 are antisense oligonucleotides (ONs) against human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide nucleic acid targetting CMV IE2 nuc sig 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                to a polyamide backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                      Example 10; Col 17; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       131 GGATGAAGAAGATCAAACG 149
                                                                                                                 Anderson K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT01679 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%;
                            93US-00009263.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19 GCAAGAAGAGAGCAAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94WO-US009039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         *tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antiviral; diagnostic; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16; Conservative
                                                                                     (ISIS-) ISIS PHARM INC
                                                                                                                 Baker B, Draper K,
                                                                                                                                             WPI; 1995-292538/38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-AUG-1993;
                            25-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-DEC-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-FEB-1995
15-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT01679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 858
AAT01679/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to Aug region, 5 untranblated region, intron/exon (I/B) junction or coding sequence of cytomegalovirus gene eslected from DNA polymerase, IE1 and IE2, or hypridisable to the E, E2, E4, E5, E7, L1 or L2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (sSDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple halices in which a first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the first PNA strand binds with the first PNA strand binds with the first PNA strand complementation of the resulting double helix or with the first PNA strand complementation cellular uptake. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by
                                                                                                            New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Identifying simple tandem repeat loci in DNA - by screening DNA library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                proteases. The present sequence targets CMV IE2 nuclear localisation
                                         Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          treatment; genetic; diagnosis;
linkage studies; analysis; alleles;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 14.2; DB 1; Length 19; Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                         Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR primer wgla3a*.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                     Mirabelli CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 131 GGATGAAGAAGATCAAACG 149
                                                                                                                                                                                    Claim 2; Page 43; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 GCAAGAAGAGAGCAAACG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ95226 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94WO-GB002789.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Simple tandem repeat (STR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           characterisation; mapping;
PCR primer wgla3a*; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Simple tandem repeat; STR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                     Crooke ST,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Armour J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LEICESTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1995-240682/31.
                                     Anderson KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09517522-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jeffreys AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-JUN-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ95226;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                            New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, intron/exon (I/B) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IEI and IEZ, or cytomegalovirus gene selected from DNA polymerase, IEI and IEZ, or hybridisable to the E, EZ, E4, E5, E6, E7, L1 or L2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (spDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which first PNA strand binds with RNA or seDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand binds cossess no significant charge and are water soluble, which facilitates cellular uptake. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by exceeding the processes. The present sequence targets CWV IEZ nuclear localisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "at least one (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently to a polyamide backbone"
                                                                                                        New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus; antiviral; diagnostic; ss.
                                       Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.2; DB 1; Length 19; 94.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels
                                     Mirabelli CK, Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peptide nucleic acid targetting CMV IE2 nuc sig 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130 CGGATGAAGAAGATCAAAC 148
                                                                                                                                                                                  Claim 2; Page 44; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cechagaagaagaaac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94WO-US009039
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Matches 16; Conservative
                                     Crooke ST,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag=
(ISIS-) ISIS PHARM INC.
                                                                        WPI; 1995-090841/12
                                    Anderson KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT01649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 signal 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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                                                                              AAQ95226 and AAQ95227 are a primer pair for the PCR amplification of the simple tandem repeat (STR) corresponding to wgla3. The STR can be used for treatment and diagnosis in human and veterinary medicine, partic. for generic characterisation, mapping, linkage studies and analysis/diagnosis of acquired disease alleles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT10877-T10898 are PCR primers used for the amplification of the human eytochrome P4501A2 gene. They are used in a method for detecting cytochrome P4501A2 gene polyworphism, in partic. for detecting a T to G base substitution at position 2064 or a C to A substitution at position 2064 or a C to A substitution at position at 4640. The method is easy, convenient and has a high degree of sensitivity and accuracy. Polymorphisms in the P4501A2 gene can lead to a modification of metabolism which may be beneficial or deleterious
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Detection of human cytochrome p4501A2 gene polymorphism - useful in gene diagnosis of metabolic activity polymorphism.
                                                                                                                                                                                                                                                              Gaps
to enrich for fragments contg. the repeats before cloning and rescreening, also simple tandem repeats for treatment or diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytochrome P450; detection; diagnosis; polymorphism; substitution; metabolism; respiration; polymerase chain reaction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human cytochrome P4501A2 (CYPIA2) gene PCR amplification primer.
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                                                                                                                                                                                                                         0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.4e+02;
ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                         Sequence 19 BP; 3 A; 9 C; 1 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                1446 GAAACATCCATTCTTCCTC 1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kinosita
                                                    Claim 25; Page 36; 51pp; English
                                                                                                                                                                                                                                                                                                                                 1 GATCCATCCATCCTTCCTC 19
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                                                                                                                                                                                                                                                                                                                                                                                                                        AAT10879 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-SEP-1996 (first entry)
                                                                                                                                                                                                                      Query Match
Best Local Similarity 84.2'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Katsuragi K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1996-087678/09.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SHIN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-JUL-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT10879
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                                                                                                                                                                                                                                                                                                                                                                                     RESULT 861
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This invention relates to novel oligonucleotide PCR primers which may be used to identify markers associated with genetic diseases and traits in dogs, in particular to disgnose genetic diseases that are not phenotypically visible and to identify carriers of recessive diseases. A specific application is diagnosis of copper toxicosis (CT). The invention can also be used to create a genetic map of the canine genome; to generate breed-specific profiles, to establish paternity and to identify dogs from DNA fingerprints. The method provides rapid analysis of the target sequences from only a small sample of DNA. Diagnosis can be done at any time in the dog's life. The present sequence is that of a PCR primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New oligonucleotide primers for diagnosis of genetic diseases and traits in dogs - amplify specific regions of the genome containing microsatellite repeats, especially for diagnosing copper toxicosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                            genetic disease; genetic trait; dog; carrier of recessive disease; copper toxicosis; CT; canine genome map; breed-specific profile; DNA fingerprint; dog identification; PCR; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 4 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                               Canine disease marker-related PCR primer 247.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Yuzbasiyan-Gurkan V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               594 TGGCTTTGGGAAACTGGAG 612
270 ACGIGCIGCICCIGGGAA 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 14; 40pp; English.
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                             1 Argrecreacceresean 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UNMI ) UNIV MICHIGAN.
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                                                                                                             ADG77403 standard; DNA; 19
                                                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Brewer GJ, Venta PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1997-435082/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                              Canis familiaris.
                                                                                                                                                                                                                                                                                                                                                                                                              18-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                             22-FEB-1996;
                                                                                                                                                                                                                                                                                                                                             WO9731011-A1
                                                                                                                                                                              11-MAR-2004
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                                                                                                                                               ADG77403;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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                                                                                RESULT 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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ID AAV47
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AC AAV47
XX
DT 25-S1
                                                                                               ADG77403
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25-SEP-1998 (first entry)

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Gaps

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The lacZ-specific primers (AAV26433 and 26434) were used to amplify and detect the lacZ gene which had been injected into C57B1/6 mice using a recombinant adeno-associated virus (AAV) vector. This confirmed the adeno-associated virus vector can be used to deliver a therapeutic molecule to the liver of a mammal. This can be used for the expression of therapeutic molecules such as secretory proteins, antisense molecules or ribozymes, in the liver, especially to treat hepatic diseases
                lac2; adeno-associated virus vector; therapeutic; liver; hepatic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel adeno-associated viral vectors - for liver specific delivery of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification; phosphorothioate; infection; retinitis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                   Chloemer RH, Wang X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19 BP; 3 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 19; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                223 GATGAGAGTGGTGGTG 241
                                                                                                                                                                                                                                                                                                                                                                                                                   Srivastava A, Ponnazhagan S, (
Zhou S, Escobedo J, Dwarki V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATGAGCGTGGTGGTTATG 19
                                         ss; PCR; primer; amplification.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX17888 standard; DNA; 19 BP.
                                                                                                                                                                                                                                97WO-US015453.
                                                                                                                                                                                                                                                                            96US-0025616P.
                                                                                                                                                                                                                                                                                                    96US-0025649P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                           (CHIR ) CHIRON CORP. (INDV ) UNIV INDIANA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          therapeutic molecule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human herpesvirus 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-193255/17.
                                                                                                                                    WO9809524-A1
                                                                                                                                                                                                                              02-SEP-1997;
                                                                                                                                                                                                                                                                            06-SEP-1996;
                                                                                                                                                                                                                                                                                                    11-SEP-1996;
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                                                                                                                                                                                  12-MAR-1998
                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX17888;
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셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the detection of the presence or absence of chromosomal abnormalities, cach abnormality being associated with a condition in a subject and each abnormality being associated with a condition in a subject and each defined by at least one characteristic nucleic acid sequence. The method comprises: (a) obtaining a sample of nucleic acids derived from a subject which may harbour one of the chromosomal abnormalities; (b) subject which may harbour one of the chromosomal abnormalities; (b) crossing the sample to a multiplex molecular amplification (MWA) procedure, where a number of the chracteristic sequences, if present in a sufficient amount, will be amplified; (c) retrieving the product(s) characteristic of the abnormal sequences and/or absence of an amplicon characteristic of the abnormal sequences to detect the presence or absence of corresponding chromosomal abnormalities; where the MWA concepture comprises the use of at least 7 mutually distinct primers (MDP) in one single reaction mixture, each of the primers defining an end of at least one characteristic nucleic acid sequences canh being determined in their opposite ends by MDP selected from the remainder of the MDP. The methods can be used for detecting chromosomal abnormalities associated with diseases including numerous leukaemia's, lamphoma's, associated with diseases including numerous leukaemia's, lamphoma's, actionad's, adenocarcinoma's, and malignant melanoma, and malignant neoplastic conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This sequence represents a primer used in the method of the invention for
                                                         PCR primer; chromosomal abnormality; abnormality detection; leukaemia; lymphoma; carcinoma; adenocarcinoma; sarcoma; glioma; neuroblastoma; medullablastoma; malignant melanoma; malignant neoplastic condition; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        samble
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Detection of chromosomal abnormalities - by subjecting patient nucleic acids to a multiplex molecular amplification procedure primers specific for characteristic nucleic acid sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                Primer TEL:114U19 for abnormality detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 73; Page 107; 126pp; English.
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                                                                                                                                                                                                                                                                                                                                                                     96DK-00001401
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                              (PALL/) PALLISGAARD N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-333344/29.
                                                                                                                                                                                                                                                                                                                       08-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                     06-DEC-1996;
                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                           WO9824928-A2
                                                                                                                                                                                                                                                                         11-JUN-1998.
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                                                                                                                                                        Synthetic.
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AAV26433;

BXXXXX

RESULT 864 AAV26433

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Gaps

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3; Indels

Yoder MC;

Anderson KP,

Kisner DL,

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Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;
                                                 Disclosure; Page 30; 99pp; English
                                                                                                                                               131 GGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                              Claim 7; Page 30; 99pp; English.
                                                                                                                                                                                                                        Anti-CMV oligonucleotide #5481
                                                                                                                                                                                     AAX17895 standard; DNA; 19
                                                                                                                                                                                                            11-MAY-1999 (first entry)
                                                                                                                        Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                              Human herpesvirus 5.
                                                                                                                                                                                                                                                                                                                                            WPI; 1998-568330/48.
                WPI; 1998-568330/48.
                                                                                                                                                                                                                                                                                                07-APR-1998;
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                                                                                                                                                                                                                                                                                                                                 Draper KG,
     Draper KG,
                                                                                                                                                                                                                                                         Synthetic
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                                                                                                                                                                                                 AAX17895
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ВР

GCAAGAAGAAGAGCAAACG 1

0.8%;

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linkages. The oligonucleotides are used to inhibit CMV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis;
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                                                                                                                                        Length 19;
                                                                                             Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                     Score 14.2; DB 1;
Pred. No. 8.4e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 49; 109pp; English.
                                                                                                                                                                                                                                     130 CGGATGAAGAAGATCAAAC 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              975 CCGAGACCTCAAGCCCCAG 993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cceaeaccitaaaccicae 19
                                                                                                                                                                                                                                                                             19 CGCAAGAAGAAGAGCAAAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cdk2 ribozyme binding site #67
                                                                                                                                                                                                                                                                                                                                                                                                   BP
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                                                                                                                                          0.8%;
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                                                                                                                                 Query Match
Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           restenosis treatment
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (IMMU-) IMMUSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-DEC-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mammalia.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAB2630;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 868
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Matches
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ID AAA8
XX
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                                                                                                                                                                                                                                                        Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA polymerase of cytomegalovirus (CMV) and are able to inhibit CMV replication. Optionally the oligonucleotides include at least one 2'-(2-methoxyethoxy) sugar modification or phosphorothicate internucleotide inharges. The oligonucleotides are used to inhibit CMV infections (by in vivo or in viro contact with cells, tissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA polymerase of cytomegalovirus (CWV) and are able to inhibit CWV replication. Optionally the oligonucleotides include at least one 2'-(2-methoxyethoxy) sugar modification or phosphorothioate internucleotide
                                                                                                                     New antisense oligonucleotides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                               Chapman S;
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Anderson KP, Chapman

Kisner DL,

98WO-US006895 97US-00838715

04-DEC-2000

AAAB2663

06-DEC-1999; 04-DEC-1998;

Tritz R,

08-JUN-2000

Mammalia

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The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDKI, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AA882415 to AAA68797. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                     The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA8615 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                         New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New hairpin and hammerhead ribozyme for inhibiting restenosis, cleave. RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 2 A; 2 C; 8 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                             Score 14.2; DB 1;
Pred. No. 8.4e+02;
                Robbins JM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                      Disclosure; Page 53; 109pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1158 GTGGGGTGTGGGCTGCATC 1176
                Barber JR,
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              Welch PJ,
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                                                      WPI; 2000-412314/35
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                                                                                                                                  PCNA and Cyclin B1
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                Tritz R,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in AAA88415. Co AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
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                                                                                                           Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
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RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
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Pred. No. 8.4e+02;
0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                        Robbins JM;
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                                                                     cdk2 ribozyme binding site #100.
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                                (first entry)
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Best Local Similarity 84.2
Matches 16, Conservative
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The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA88415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
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                                           Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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Pred. No. 8.4e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 55; 109pp; English.
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             cdk6 ribozyme binding site #58
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Best Local Similarity
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                                      Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
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Pred. No. 8.4e+02;
0; Mismatches 3;
             Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
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                                                                                                           GCCACCGTCTACAAAGGCA 670
                                                                                                                                        GCCACCGTTTACAAGGCCA 19
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Best Local Similarity
Matches 16; Conserv
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Best Local Similarity
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Pred. No. 8.4e+02;
0; Mismatches 3;
  Score 14.2; DB 1;
Pred. No. 8.4e+02;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 49; 109pp; English.
                                                                                 1167 GGGCTGCATCTTCTATGAG 1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1170 CTGCATCTTCTATGAGATG 1188
                                                                                                                        GGGCTGCATCTTTGCTGAG 19
                                                                                                                                                                                                                                                                                                                                              cdk2 ribozyme binding site #101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGCATCTTTGCTGAGATG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cdk7 ribozyme binding site #10
                                                                                                                                                                                                                            BP.
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                      84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84.2%;
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                                                                                                                                                                                                                                                                                                       (first entry)
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                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16; Conservative
                                                                                                                                                                                                                            standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tritz R, Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (IMMU-) IMMUSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-412314/35
Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200032765-A2
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                                                                                                                                                                                                                                                                   AAA82664;
                                                                                                                                                                                                                            AAA82664
                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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                                                                                                                                                                                  RESULT 875
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                                                                                                                                                         The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1. PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in RAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss
                                       New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New hairpin and hammerhead ribozyme for inhibiting restenosis, cleave
RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.48+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Robbins JM;
                                                                                                                        Disclosure; Page 49; 109pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 49; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 976 CGAGACCTCAAGCCCCAGA 994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cdk2 ribozyme binding site #99.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                           Ouery Match
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-412314/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Welch PJ,
  WPI; 2000-412314/35
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à 임 RESULT 874 AAA82662 AAA82662,

Mammalia

Tritz R,

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AAZ40735 standard; DNA; 19
                                                                                                                                                                                  21-FEB-2000 (first entry)
                                                                                                              restenosis treatment
                                          (IMMU-) IMMUSOL INC.
                                                         WPI; 2000-412314/35
             WO200032765-A2.
                                                                                                                                                                                                                                                      24-OCT-1988;
19-OCT-1989;
                                                                                                                                                                                                                                           24-MAR-1997;
                                   04-DEC-1998;
                                                                                                                                                                                                                                                              31-MAR-1993;
                            06-DEC-1999;
                                                                                                                                                                                                                             US5993813-A,
                                                                                                                                                                                                                                                   19-OCT-1988;
                                                                                                                                                                                                                                     30-NOV-1999
                     08-JUN-2000
                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                           AAZ40735;
                                                 ritz R,
      Mammalia
                                                                                                                                                                                                           primer.
                                                                                                                                                                                                                      Mus sp.
                                                                                                                                                            RESULT 877
                                                                                                                                                                 AAZ40735/
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Thimers have to be a sociated state of the variable states to a mew anti-tumour associated stalylated glycoprotein antigen (TAG)-72 mouse-human chimeric antibody. The variable region has a heavy chain (VH) where VH is encoded by a DNA sequence homologous to the VHalpharAG germline gene (AAZ40701). The invention includes a method for in vivo carcinoma targeting through the administration to an animal of an anti-TAG-72 mouse-human chimeric attibody produced by specific cell lines. The antibody or a fragment are conjugated to an imaging marker or therapeutic agent, in a pharmaceutically acceptable, nontoxic, sterile carrier. The chimeric antibody binds to TAG-72 which is found on certain human tumour cells. The tissue regions containing the tumours can be detected via the markers and/or can be treated via the therapeutic agents. The method is useful for in vivo diagnosis and treatment of cancer by administering to an animal an effective amount of a composition for the in situ detection of carcinoma lesions. The method is useful for intraoperative therapy, consisting of locating the position of a tumour through the amount
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; keratinocyte derived interferon; KDI; viral infection; lymphoma; immune system related disorder; cancer; multiple sclerosis; AIDS; hepatitis; Cryptosporidium parvum infection; leukaemia; arthritis;
                                                                                                                                                                                                                                                                Primers AAZ40735-Z40740 are used to sequence the VHalphaTAG germline
                                                                                                                                                    New mouse-human chimeric antibody, useful for in vivo diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     diabetes; allergy; chronic myelogenous leukaemia; PCR primer; ss.
                                               Anderson WHK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.2; DB 1; Length 19;
14.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 4 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
                                             Kaplan DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primer specific for IFNa2 gene SEQ ID 51.
                                               Schlom J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1293 GTCCAACGAGGAGTTCAAG 1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lafleur DW;
                                                                                                                                                                                                                     37; 120pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JAN-2000; 2000WO-US001239
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Matches 16; Conservative
                                               Gourlie BB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Moore PA,
(DOWC ) DOW CHEM CO.
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                                                                                                            WPI; 2000-038240/03
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21-JUL-1999;
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                                          Mezes PS,
Rixon MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF72367;
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                                                                                                                                                                             cancer
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TAG-72; variable region; heavy chain; carcinoma; detect; tumour; ss;
mouse-human chimeric antibody; therapeutic agent; intraoperative therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           in
      Ribozyme, hairpin, hammerhead, gene therapy, vasotropic, restenosis, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAABA15 to AAAB6787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                            New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 14.2; DB 1;
Pred. No. 8.4e+02;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                                                           Welch PJ, Barber JR, Robbins JM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 56; 109pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCCACCGTCTACAAAGGC 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCCACCGTTTACAAGGCC 19
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88US-00261942.
89US-00424362.
93US-00040687.
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28-JUL-2000; 2000WO-EP007314.
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22-FEB-2000; 2000EP-00103361
                                                                                                                 84.2%;
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                                                                                                                                                                                                                                                    AAF91205 standard; DNA; 19
                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                   Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                       04-MAY-2001
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                                                                                                                                                                                                                                                                              AAF91205;
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                                                                                                      Query Match
                                                                                                                                 Matches
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AAF91205
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                                                                                   This invention relates to human polynucleotide sequence AAF72333 which encodes keratinocyte derived interferon (KDI) protein AAB49774, which is a member of the interferon family. AAF72338 represents the codon optimised sequence of KDI. The human KDI gene is located on chromosome 9. The specification includes KDI related protein sequences AAB49775 - AAB49789, AAS ogiven in the specification are primer, probe and polynucleotide sequences represented by AAF72334-AAF72370 (excluding AAF72338) which are used in the isolation and characterisation of the KDI sequence of the invention. The KDI polypeptide is used to prevent, reat or ameliorate a medical condition such as immune system-related disorder, viral infection, viral exposure and cancer in a mammal. Specific disorders which can be treated by KDI include multiple sclerosis, lymphoma, acquired immune deficiency syndrome, viral hepatitis, Cryptosporidium parvum infection, chronic myelogenous behaving a substitis, diabetes and allergies
                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention provides nucleotides encoding molecular variants of
        Isolated keratinocyte derived interferon protein and polynucleotide used to prevent, treat or ameliorate an immune system-related disorder, viral infection, viral exposure and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New polynucleotide encoding a molecular variant Multi Drug Resistance (MDR)-1 polypeptide is useful for diagnosing and treating diseases associated with abnormal MDR-1 expression or function, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MDR-1; multi drug resistance-1; drug uptake; disease; cancer; matory disease; neuronal disease; CNS disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human multi drug resistance-1 gene related sequence SEQ ID NO: 293.
                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Roots I;
                                                                                                                                                                                                                                                                                                                    Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eichelbaum M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cardiovascular disease; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
                                                              Page 187; 303pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 137; 154pp; English
                                                                                                                                                                                                                                                                                                                                                                                                  926 TCCAGCTGCTCCGTGGCCT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                      19 TCAAGCTGCTCTGTGGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-JUL-2000; 2000WO-EP007314.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF91206 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Brinkmann U, Hoffmeyer S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-159855/16.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-FEB-2001
                                                              Example 5;
                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 879
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the human multi drug resistance-1 (MDR-1) protein. These can be used to identify compounds capable of treating multidrug resistance and sensitivity interfering resulting from polymorphisms in MDR-1, which can lead to difficulties in treating cancer, cardiovascular, neuronal, inflammatory and CNS diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polynucleotide encoding a molecular variant Multi Drug Resistance (MDR)-1 polypeptide is useful for diagnosing and treating diseases associated with abnormal MDR-1 expression or function, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
inflammatory disease; neuronal disease; CNS disease;
cardiovascular disease; PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human multi drug resistance-1 gene related sequence SEQ ID NO:
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                                                                                                                                                                                                                                                                       Length 19;
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                                                                                                                                                                                                                                                                                                                                      3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Roots I;
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                                                                                                                                                                                                     Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                    Score 14.2; DB 1;
Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Brinkmann U, Hoffmeyer S, Eichelbaum M,
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                                                                                                                                                                                                                                                                                                                                                                                                        388 TCCTCGGATGAGGTGCAGT 406
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
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10017621-3sl.rng

Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO:584.

(first entry)

10-SEP-2001

AAH58160;

AAH58160 standard; DNA; 19 BP

RESULT 882

AAH58160

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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a citozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid molecule (II) comprising a promoter operably linked to a concleic acid segment encoding (I). (I) can have antipsoriatic, antisickling, ophthalmological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                      Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MWP; matrix metalloproteinase; growth factor; reductase; scarring; oyrostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                            Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:352.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
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                      AAH57928 standard; DNA; 19 BP
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                                                                                                                  10-SEP-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in finlammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, cophthalmological, vulnerary, keratolytic and vincide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, actomic described wart. They can also be used for treating proliferative eye diseases such as adjabetic retinopathy, virreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing carring such as keloid, adhesion and hypertrophic or hypertrophic burn and contracting and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn and contracting and preventing contractions.
                                                                                                                                            Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psocilasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratolytic; gene therapy; viral wart; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 1 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
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Gaps

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0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02; tive 0; Mismatches 3; Indels

1094 CACTGTGGTACCGGCCCCC 1112

6

16; Conservative

Best Local Similarity

Matches

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BP.

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exemplification of the present invention
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1 TCGCTGACTTCGGCCTTGC 19
                                                                                             AAH58252 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-OCT-2000; 2000WO-US029500.
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                                                                                                                                                                                                                                                                                                                                                                                                                   sickle cell retinopathy; ss.
                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
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                                                                                                                                   AAH58252;
                                                     RESULT 883
                                                                           AAH58252
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recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antistoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisting; ophthalmological; keracolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                      Cell-cycle dependent kinase cdk? ribozyme binding site SEQ ID NO:675.
                                                                                                                                                                                                                                                                                                                                                                                         Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
                                                1 GCCACCGTTTACAAGGCCA 19
652 GCCACCGTCTACAAAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-0161532P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sickle cell retinopathy; ss.
                                                                                                                                                                                   AAH58251 standard; DNA; 19
                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                      AAH58251;
                                                                                                                                   RESULT 884
                                                                                                                                                              AAH5825
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     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [1] which cleaves RNA encoding a cyrokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule [11] comprising a promoter operably linked to a nucleic acid segment encoding [1]. [1] can have antipsoriatic, ophthalmological, cytostatic, antiseborrheic, antidiabetic, antisickling, dermatological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. [1] can be used in gene therapy. [1] and [11] are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can slo be used for treating proliferative eye diseases such as diabetic retinopathy, vitreortinopathy, sickle cell retinopathy circuiting such as kelinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as kelinopathy and retinal detachment, and hypertrophic or hypertrophic burn
                                                                                                                                                                                                                                                                                                                            Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic; retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis, actinic keratosis; squamous cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      is keloid, adhesion and hypertrophic or hypertrophic burn to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                 Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:676.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, captualmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as postiasis, atopic dermatiis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn companies and the contracting and preventing companies and contracting and preventing contracting and preventing contracting contracting contracting contracting contractions and contracting and preventing contracting contrac
Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
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84.2%; Pred. No. 8.4e+02;
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                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 121; 408pp; English.
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Best Local Similarity
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Gaps . 0

0.8%; Score 14.2; DB 1; Length 19; 44.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels

84.2%;

Query Match 0.8 Best Local Similarity 84.2 Matches 16; Conservative

Gaps

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Length 19; 3; Indels

Score 14.2; DB 1; Pred. No. 8.4e+02; 0; Mismatches 3;

84.2%;

Query Match 0.8 Best Local Similarity 84.2 Matches 16; Conservative

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Gaps

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Human, ribozyme therapy, hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; darmatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratosis; squamous cell carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a inflammation, neares RNA encoding a cytchine involved in inflammation, matrix metalloproteinase (MMP), cyclin, coll-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antiebborrheic, antidiabets, anticicking, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are sell for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing
                                                                                                                                                                                                                                                                                             Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:481.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
    ·.
    Indels
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0; Mismatches
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                                        651 TGCCACCGTCTACAAAGGC 669
                                                                             reccaccerracaagecc 19
                                                                                                                                                                             AAH58057 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-OCT-2000; 2000WO-US029500.
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    Conservative
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    16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
    Matches
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scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention

Sequence 19 BP; 2 A; 2 C; 8 G; 7 T; 0 U; 0 Other;

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inflammation, matrix metalloproteinage (MMP), cyclin, cell-cycle dependent Kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, characological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermaticis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, virreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn securities.
                                                                                                                                                                                                                                                                                                                                                                                             matrix metalloproteinase, growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                             Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a
                                                                                                                                                                                                                                                                     Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:216.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          exemplification of the present invention
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1158 GTGGGGTGTGGCTGCATC 1176
                                       Grecaererrecererare 19
                                                                                                                                                BP.
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                                                                                                                                             AAH57792 standard; DNA; 19
                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                         AAH57792;
                                                                                                        RESULT 886
                                                                                                                            AAH57792
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cyrckine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, artisicorratic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keracolytic and virucide activities, and cleaves RNA encoding ortokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keracosis.

C squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detechment, and for treating and preventing carring such as Keloid, adhesion and hypertrophic or hypertrophic burn scar. AMH57577 to AMH62099 represent sequences used in the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; racognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix, metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antipsoriatic; ophthalmological; keracolytic; gene therapy; viral wart; acpor dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                          Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:217.
                                                                                            Gaps
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0
                                       0.8%; Score 14.2; DB 1; Length 19; larity 84.2%; Pred. No. 8.4e+02; Conservative 0; Mismatches 3; Indels
Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 87; 408pp; English.
                                                                                                                                 975 CCGAGACCTCAAGCCCCAG 993
                                                                                                                                                                             1 cceacaccitaaaccicae 19
                                                                                                                                                                                                                                                                                        AAH57793 standard; DNA; 19 BP
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                                     Query Match
Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                       AAH57793;
                                                                                                                                                                                                                                            RESULT 887
                                                                                                                                                                                                                                                                      AAH57793
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (WMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, or nucleic acid segment encoding (I). (I) can have antipsoriatic, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermaticis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can sloobe used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing
                                                                                                                               .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MNP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; tappic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
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                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                               Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:249.
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0
                                                                                     Length 19;
                                                                                                                             3; Indels
                                         Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                   Score 14.2; DB 1;
Pred. No. 8.4e+02;
                                                                                                                             0; Mismatches
exemplification of the present invention
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                                                                                                                                                                       976 CGAGACCTCAAGCCCCAGA 994
                                                                                                                                                                                                              1 céagacerraaacercaga 19
                                                                                                                                                                                                                                                                                                                    AAH57825 standard; DNA; 19 BP
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                                                                                                       84.2%;
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                                                                                   Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                                                                                                                                                                              RESULT 888
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloprotainse (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, otheratological, cytostatic, antiseborrheic, antidiabetic, antisickling, dermatological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can skin be used for treating proliferative eye diseases such as diabetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
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scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention
                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:248.
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0
                                                                                                                           Length 19;
                                                                                                                                                               3; Indels
                                                                                    Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                      Score 14.2; DB 1;
Pred. No. 8.4e+02;
0; Mismatches 3;
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                                                                                                                                                                                                      1169 GCTGCATCTTCTATGAGAT 1187
                                                                                                                                                                                                                                           1 GCTGCATCTTTGCTGAGAT 19
                                                                                                                                                                                                                                                                                                                                              AAH57824 standard; DNA; 19 BP.
                                                                                                                        0.8%;
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                                                                                                                        Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                     RESULT 889
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, ribozyme therapy, hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatcological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and elaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,
retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treathing and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 depresent sequences used in the
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:250
                                                                                                                                                                                                         ;
0
                                                                                                                                                            0.8%; Score 14.2; DB 1; Length 19; 44.2%; Pred. No. 8.4e+02; ve. 0; Mismatches 3; Indels
                                                                                                                        Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other
                                                                                exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 90; 408pp; English.
                                                                                                                                                                                                                                                 1167 GGGCTGCATCTTCTATGAG 1185
                                                                                                                                                                                                                                                                                       1 GGCTGCATCTTTGCTGAG 19
                                                                                                                                                                                                                                                                                                                                                                                          AAH57826 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0161532P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-OCT-2000; 2000WO-US029500.
                                                                                                                                                                                   84.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                      Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tritz R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-300427/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (IMMU-) IMMUSOL INC.
                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200130362-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-MAY-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                AAH57826;
                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                                                                                                       AAH57826
                                                                                                                                                                                                                                                                                                                                                    RESULT
      888888
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Gaps

; 0

Length 19;

Score 14.2; DB 1; Pred. No. 8.4e+02; 0; Mismatches

0.8%;

1505 CCATATTTGCACTAAAGGA 1523

Conservative

Best Local Similarity Matches 16; Conserv

Query Match

16;

13

CCATATTTGCCATAAAGAA

g

à

BP.

ABL88857 standard; DNA; 19

RESULT 892

ABL88857

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0
         also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                   HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:81.
                                                                                                                                   Gaps
                                                                                                                                   ;
0
or basal cell carcinoma and viral or seborrheic wart.
                                                                                                                                                                                                                                                                                                                           Binding molecule; HIV-1; human immunodeficiency virus type 1; reverse transcriptase; binding group; ss.
                                                                                                             Length 19;
                                                                                                                                   Indels
                                                                                       Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                            Score 14.2; DB 1;
Pred. No. 8.4e+02;
                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
                                                                exemplification of the present invention
                                                                                                                                                       1170 CTGCATCTTCTATGAGATG 1188
                                                                                                                                 0;
                                                                                                                                                                             crecarcirrecreagare 19
                                                                                                                                                                                                                                                                                                                                                           Human immunodeficiency virus 1.
                                                                                                             0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                        20-JUL-2000; 2000EP-00202611
                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-JUL-2000; 2000EP-00202611
                                                                                                                                                                                                                                    ABL88859 standard; DNA; 19
                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                   Conservative
                                                                                                           Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                            EP1174518-A1
                                                                                                                                                                                                                                                                               22-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                  23-JAN-2002.
                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                          ABL88859;
                                                                                                                                                                                                              RESULT 891
55555555X&
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HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:79.

(first entry)

22-MAY-2002

ABL88857;

Binding molecule, HIV-1; human immunodeficiency virus type 1; reverse transcriptase; binding group; ss.

Human immunodeficiency virus 1.

EP1174518-A1

Synthetic.

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The present invention describes a collection of binding groups for a family of nucleic acids comprising members of relative high and relative how significance, where the binding groups are selected to be capable to identify, alone or in combination, essentially all members of the family of nucleic acids of relatively high significance. The collection of binding groups is useful for typing of mucleic acid in a clinical sample, by contacting the nucleic acid with the collection and determining whether one or more binding groups bound to the nucleic acid of the sample. This method is useful for determining whether the sample comprises at least a part of a member of relatively high significance of a family of nucleic acids. The collection of binding groups is useful for diagnosing the severity of a disease caused by a pathogen containing a member of a family of nucleic acids. ABLB8779 to ABLB9321 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oligonucleotide sequences used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1505 CCATATTTGCACTAAAGGA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CAATATTTGCCATAAAGGA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
ద
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The present invention describes a collection of binding groups for a family of nucleic acids comprising members of relative high and relative low significance, where the binding groups are selected to be capable to identify, alone or in combination, essentially all members of the family binding groups is useful for typing of nucleic acid in a clinical sample, by contacting the nucleic acid in a clinical sample, by contacting the nucleic acid in a clinical sample, whether one or more binding groups bound to the nucleic acid of the sample. This method is useful for determining whether the sample comprises at least a part of a member of relatively high significance of a family of nucleic acids. The collection of binding groups is useful for diagnosing the severity of a disease caused by a pathogen containing a member of a family of nucleic acids. ABL88779 to ABL89321 represent oligonucleotide sequences used in the exemplification of the present

Sequence 19 BP; 8 A; 4 C; 2 G; 5 T; 0 U; 0 Other;

invention

Collection of binding groups for determining or typing samples, especially clinical samples, has groups capable to identify essentially all members of the family of nucleic acids of relatively high

Disclosure; Page 26; 166pp; English.

Goudamit J;

Gemen B,

Loukachov VV,

WPI; 2002-156696/21.

Collection of binding groups for determining or typing samples, especially clinical samples, has groups capable to identify essentially all members of the family of nucleic acids of relatively high

Disclosure; Page 26; 166pp; English.

significance

(AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.

20-JUL-2000; 2000EP-00202611. 20-JUL-2000; 2000EP-00202611. Goudsmit J;

Loukachov VV, Van Gemen B,

WPI; 2002-156696/21.

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Collection of binding groups for determining or typing samples, especially clinical samples, has groups capable to identify essentially all members of the family of nucleic acids of relatively high
                                                                                 HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:73.
                                                                                                   Binding molecule, HIV-1; human immunodeficiency virus type 1; reverse transcriptase; binding group; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19 BP; 10 A; 2 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                   (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
                                                                                                                                                                                                                                                                      Goudsmit J;
                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 24; 166pp; English
                                                                                                                                  Human immunodeficiency virus 1.
                   ABL88851 standard; DNA; 19 BP.
                                                                                                                                                                                                          20-JUL-2000; 2000EP-00202611
                                                                                                                                                                                                                              20-JUL-2000; 2000EP-00202611
                                                                                                                                                                                                                                                                      Van Gemen B,
                                                             22-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                           WPI; 2002-156696/21.
                                                                                                                                                                                                                                                                      Loukachov W,
                                                                                                                                                                                                                                                                                                                                               significance.
                                                                                                                                                                 EP1174518-A1
                                                                                                                                                                                     23-JAN-2002.
                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention
                                         ABL88851;
RESULT 893
ABL88851
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; 0 The present invention describes a collection of binding groups for a family of nucleic acids comprising members of relative high and relative low significance, where the binding groups are selected to be capable to identify, alone or in combination, essentially all members of the family of nucleic acids of relatively high significance. The collection of binding groups is useful for typing of nucleic acid in a clinical sample, by contacting the nucleic acid with the collection and determining whether one or more binding groups bound to the nucleic acid of the sample, rhis method is useful for determining whether the sample comprises at least a part of a member of relatively high significance of a family of nucleic acids. The collection of binding groups is useful for diagnosing the severity of a disease caused by a pathogen containing a member of a family of nucleic acids. ABL88779 to ABL89321 represent oligonucleotide sequences used in the exemplification of the present Gaps 0.8%;

ö Score 14.2; DB 1; Length 19; Pred. No. 8.4e+02; 0; Mismatches 3; Indels Query Match
Best Local Similarity 84.2
Matches 16; Conservative

CCATATTTGCACTAAAGGA 1523 CAATATTTGCAATAAAGAA 19 1505

à g

AAD36056 standard; DNA; 19 09-AUG-2002 AAD36056; AAD36056/c ID AAD360 XX AC AAD360 DT 09-AUG

RESULT 894

(first entry)

New isolated cardiac myosin light chain kinase (CMLCK) protein, useful for identifying CMLCK modulators that are used for treating cardiac dysfunction e.g. systolic or diastolic dysfunction, myocardial Rabbit, cardiac myosin light chain kinase, cMLCK, tricuspid valve, cardiac dysfunction, systolic dysfunction, mitral valve prolapse; diastolic dysfunction, cardiac hypertrophy; tricuspid insufficiency; coronary heart disease; myocardial infarction; mitral insufficiency; valvular heart disease; congestive heart failure; mitral valve; Rabbit skeletal muscle MLCK DNA amplifying downstream primer. Davis JS; cardiomyopathy; cardiant; PCR; primer; ss. Hassanzadeh S, Winitsky S, (USSH) US DEPT HEALTH & HUMAN SERVICES. 12-SEP-2001; 2001WO-US028639. 12-SEP-2000; 2000US-023246P. 13-SEP-2000; 2000US-0232456P. Oryctolagus cuniculus. WPI; 2002-394135/42. WO200224889-A2 Epstein ND, 28-MAR-2002

infarction

Disclosure; Page 28; 105pp; English.

The invention relates to cDNA, protein sequence and genomic structure of the human cardiac isoform of myosin light chain kinase (cMLCK) and mutations in cMLCK gene that are associated with cardiac dysfunction. The invention also relates to methods for identifying agents that modulate cMLCK activity, cMLCK is useful for detecting enhanced susceptibility of a subject to cardiac dysfunction. CMLCK is useful for screening for an agent that modulates its biological activity. The method is useful for enhancing or preserving cardiac function in a subject having cardiac dysfunction, and harbouring a mutation in CMLCK allele. The method is useful for enhancing or preserving cardiac function in a subject having cardiac dysfunction as systolic dysfunction, diastolic dysfunction, cardiac hypertrophy, cardiachypeathy, coronary heart disease, myocardial infarction, or congestive heart failure, or for preserving cardiac function, or cardiac dysfunction which comprises valvular heart disease such as mitral valve disease, tricuspid valve disease, mitral insufficiency, tricuspid insufficiency, or mitral valve prolapse. The method is useful for treating cardiac dysfunction, e.g., systolic or diastolic dysfunction, coronary heart disease, cardiac hypertrophy, cardiacypathy, myocardial infarction, or congestive heart failure. The present sequence is a PCR primer used to amplify rabbit skeletal muscle

Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

Gaps ·: 0.8%; Score 14.2; DB 1; Length 19; 44.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels 84.28; 16; Conservative Query Match Best Local Similarity Matches

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19 gerecaceredacercase 1 RESULT 895

969 GCTACACCGAGACCTCAAG 987

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ACC47620 standard; DNA; 19 11-SEP-2003 (first entry) ACC47620; ACC47620 RXXXE

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Blakeslea trispora. The carRP gene (ACC47617) encodes a bifunctional enzyme, lycopene cyclase/phytoene synthase (ABE97464), and the carB gene (ACC47618) encodes phytoene dehydrogenase (ABE97465). The invention also encompasses plasmids for the expression of additional copies these genes, and plasmids for the expression of heterologous genes under the control of the carRP or the carB promoter. The carRP and carB genes can be overexpressed to increase production of beta-carotene in B. trispora, or to modify the beta-carotene blosynthetic pathway to create B. trispora strains able to produce other caroteneids such as lycopene. The promoters of these genes may also be used to control expression of heterologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention relates to beta-carotene biosynthetic genes from the fungus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  genes such as the Streptoalloteichus hindustanus bleomycin resistance
gene (bleR) in B. trispora. Sequences ACC47619-ACC47620 represent Mucor
circinelloides carRP PCR primers used to generate a probe used in the
isolation of Blakeslea trispora DNA fragments containing both the carRP
                                                                                                                                                                                                                                                                                                                                                                                                                                      New carRP and carB genes from Blakeslea trispora, useful for increasing production of beta-carotene or other carotenoids, also related vectors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Single nucleotide polymorphism; analgesic; variant allele; A-161T; human serotonin 1B receptor gene; addictive disease; neurologic; psychiatric condition; pain reliever; analgesia; PCR; primer; ss.
                                               Beta-carotene; biosynthesis; biosynthetic pathway; carotenoid; Blakeslea trispora; carRP; bifunctional enzyme; lycopene cyclase; phytoene synthase; carB; phytoene dehydrogenase; PCR; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.2; DB 1; Length 19; 44.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human serotonin 1B receptor gene PCR primer, SEQ ID No 7.
             Mucor circinelloides carRP PCR primer #62, SEQ ID NO:6.
                                                                                                                                                                                                                                                                                                                                                Diez Garcia B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 4 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and carB genes in an example from the invention
                                                                                                                                                                                                                                                                                                                                              Rodriguez Saiz M, Marcos Rodriguez AT, Die
De La Fuente Moreno JL, Barredo Fuente JL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; Page 41; 50pp; Spanish.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1354 CACGCACCCCGACTTGATA 1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACGCACGCCGCCTTGACA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAL53983 standard; DNA; 19 BP.
                                                                                                                                                                                                                                   26-SEP-2002; 2002WO-ES000452.
                                                                                                                                                                                                                                                                       26-SEP-2001; 2001ES-00002161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                           (ANTI ) ANTIBIOTICOS SAU.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                        Mucor circinelloides
                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-313642/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and polypeptides.
                                                                                                                                                            WO2003027293-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
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                                                                                                                                                                                                03-APR-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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serotonin 1B receptor gene, comprising a DNA sequence having a variation in a sequence of 1749 base pairs defined in the specification, where the variation comprises A-161T. The human serotonin 1B receptor gene is useful for determining a susceptibility in a subject to at least one addictive disease, neurologic or psychiatric condition or disease. The addiction to other psychostimulants, nicotine addiction, barbiturate or sedative hypotonic addiction, anxiolytic addiction, barbiturate or receptor psychiatric condition or disease is anxiety, depression, pathological aggression, or compulsive gambling. The human serotonin 1B receptor gene is also useful for determining a therapeutic analgesia. This polynucleotide sequence represents a PCR primer of the human serotonin 1B receptor gene of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel isolated variant allele of human serotonin 1B receptor gene useful for determining susceptibility to addictive, neurologic or psychiatric conditions or diseases in a subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Racing potential, horse; grandpaternal DNA; over-represented; breeding; grandmother; performance; progeny horse; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel isolated variant allele of the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.2; DB 1; Length 19; 34.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 7 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                       Kreek MJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124 ATGGATCGGATGAAGAGA 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example; Page 12; 20pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Multiplex group PCR primer #330.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ATGGAGCGGACGAGGAGA 19
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                                                                                                                                                                                      15-MAY-2000; 2000US-0204169P.
                                                                                                                          15-MAY-2001; 2001US-00855991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                    Cigler T, Laforge KS,
                                                                                                                                                                                                                                               (CIGL/) CIGLER T.
(LAFO/) LAFORGE K S.
(KREE/) KREEK M J.
                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-102507/09.
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Best Local Similarity
US2002142312-A1
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The invention relates to a novel method for determining racing potential of a horse. The method comprises measuring: whether grandpaternal DNA is over-represented in the genome of the horse; or in the case where one of the grandmothers was selected for breeding on the basis of racing performance, whether grandmaternal DNA from the selected grandmother is over-represented in the genome of the horse which indicates that the horse has good racing potential. The method of the invention is useful for determining the racing potential of a horse or for obtaining a progeny horse with good racing potential. This polynucleotide sequence represents a PCR primer used in the detection method of over-representation of DNA from male grandparents of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, keratinocyte derived interferon, KDI; immune system disorder; inflammation; cancer; blood disorder; cardiovascular disorder; cerebrovascular disease; wound; neurological disease; viral infection; bacterial infection; blood vessel growth inhibition; immunomodulatory; antiinflammatory; vasctropic; haemostatic; cardiant; vulnerary; cerebroprotective, noctropic; neuroprotective; antibacterial; virucide; antiarteriosclerotic; cytostatic; quantitative PCR; QPCR; IFNa2; primer;
                                                                                                                            Determining the racing potential of a horse comprises measuring whether grandpaternal or grandmaternal DNA from the selected grandmother DNA is over-represented in the genome of the horse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human IFNa2 specific PCR primer #2 used in quantitative PCR reaction.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.2; DB 1; Length 19;
14.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
(ANIM-) ANIMAL HEALTH TRUST.
(BRHO-) BRITISH HORSERACING BOARD.
                                                                                                                                                                                                          Example 2; Page 25; 49pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         194 CCAATGGTGCCCTGAGCA 212
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21-JUL-1999; 99WO-US016424.
20-JAN-2000; 2000US-00487792.
20-JAN-2000; 2000WO-US01239.
21-JUL-2000; 2000US-0219621P.
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Matches 16; Conservative
                                                         Swinburne JE;
                                                                                          WPI; 2003-129314/12.
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                                                         Binns MM,
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Gaps

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derived interferon (VDI) protein, and the polynucleotide sequences encoding it. The gene encoding human KDI maps to chromosome 9. The novel KDI protein is a member of the interferon family. The invention also describes vectors, host cells, and recombinant methods for producing the XDI protein. The invention also discloses methods for identifying agonists and antagonists of KDI activity. An antibody that binds to the XDI protein, the KDI polypeptide sequence, and the polynucleotide sequence encoding KDI are useful in the diagnosis, prevention and treatment of disorders associated with the aberrant expression of the KDI protein, such as disorders of the immune system, inflammation, cancer, blood disorders, cardiovascular disorders, cerebrowascular diseases, botterial or viral infections and blood vessel growth inhibition. The present sequence represents a PCR primer weeks in a quantitative PCR (QPCR) reaction in the examples of the present
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                                                                      New isolated antibody that binds a keratinocyte derived interferon (KDI) protein, for the diagnosis, prevention and treatment of disorders with aberrant expression of the KDI protein, such as disorders of the immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                       The present invention relates to the isolation of human keratinocyte
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.2; DB 1; Length 19;
llarity 84.2%; Pred. No. 8.4e+02;
Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                  Example 5; Col 166; 147pp; English.
Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             926 TCCAGCTGCTCCGTGGCCT 944
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Lafleur DW, Moore PA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-268144/26.
                                     WPI; 2003-227870/22.
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es 16; Conserv
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                                                                                                                                  system.
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Matches
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Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
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Best Local Similarity
Matches 16; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unidentified
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                                                                                                                                                                                                                                                                                                                                             treating colorectal, cervical, gastric, lung, ovarian or paraceatic composition for treating colorectal, cervical, gastric, lung, ovarian or paraceatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a cytochrome p450, subfamily IIIA (nifedipine coxidase), polypeptide 5 (CYPAAS) polymuclectide (II), (I) and (II) have cytostatic activity. The therapeutic applications of (I) is improved, cytostatic activity. The therapeutic applications of (I) is improved, cytostatic activity. The therapeutic applications of (I) is improved, cytostatic activity. The therapeutic applications of (I) is improved, cytostatic activity. The therapeutic applications of (I) is improved, cytostatic activity appropriate derivative of (I). Therefore, undesirable, cytomethially harmful treatment of those subjects who do not respond to the treatment with substances (nonresponders), as well as the development of cytomethications of the present impresent sequences used in the exemplification of the present impresent sequences used in the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes the use of irinotecan (1) or its derivative for the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or panoreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a cytchrome p450, subfamily IIIA (nifedipine oxidase), polypeptide 5 (CYP3AS) polynucleotide (II). (1) and (II) have
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cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide
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                                                                                                                                                                                                                                                                                                  0.8%; Score 14.2; DB 1; Length 19;
14.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                        Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                            exemplification of the present invention
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             Disclosure; Page 44; 86pp; English
                                                                                                                                                                                                                                                                                                                                                          388 TCCTCGGATGAGGTGCAGT 406
                                                                                                                                                                                                                                                                                                                                                                         TCCTCTGAGGATGTGCAGT 19
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24-MAY-2002; 2002EP-00011710
                                                                                                                                                                                                                                                                                                                84.2%;
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ID ACF62641 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic, PCR primer; ss.
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Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                          potentially harmful treatment of those subjects who do not respond to the treatment with substances (nonresponders), as well as the development of drug resistances due to suboplimal drug dosing can be avoided. ACF62200 to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
cytostatic activity. The therapeutic applications of (I) is improved, since it is possible to individually treat a subject with an appropriate dosage and/or an appropriate derivative of (I). Therefore, undesirable, harmful or toxic effects are efficiently avoided. Unnecessary and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           irinotecan; colorectal cancer; cervical cancer; gastric cancer; lung cancer; ovarian cancer; pancreatic cancer; malignant glioma; variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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Pred. No. 8.4e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                    exemplification of the present invention
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24-MAY-2002; 2002EP-00011710.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   84.2%;
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The present invention describes a method for the use of irinotecan (I) or treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a multidrug resistance protein 1 (MRP1) golynucleotide (II). (I) has cytostatic activity. (I) or its derivative can be used for the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject, where the subject is a human (preferably African or Asian) or a mouse. The present sequence represents a sequence which is used in the exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                         irinotecan; colorectal cancer; cervical cancer; gastric cancer;
lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Use of irinotecan or its derivative for preparation of a pharmaceutical composition for treating cancer in a subject having a genome with a variant allele comprising a multidrug resistance protein 1
                                                     Gaps
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44.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
                Length 19;
                                                   3; Indels
                                                                                                                                                                                                                                                                                                                         MRP1 based cancer related nucleic acid SEQ ID NO:470.
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                0.8%; Score 14.2; DB 1;
84.2%; Pred. No. 8.4e+02;
ive 0; Mismatches 3;
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                                                                                       388 TCCTCGGATGAGGTGCAGT 406
                                                                                                                          1 rccrcrcaggargragr 19
                                                                                                                                                                                                                 ADB21312 standard; DNA; 19 BP.
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24-MAY-2002; 2002EP-00011710.
                                                                                                                                                                                                                                                                                      20-NOV-2003 (first entry)
                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Heinrich G, Kerb R;
Query Match
Best Local Similarity
Local 16; Conserv?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-354397/33.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-FEB-2003
                                                                                                                                                                                                                                                      ADB21312;
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The present invention describes a method for simultaneously detecting the presence of multiple target nucleic acid molecules in a biological sample comprising: (a) isolating and enriching target nucleic acid molecules from the biological sample; (b) treating the enriched target nucleic acid molecules of schoological sample; (c) performing linear PCR on the cological sample; (c) performing linear PCR on the cological sample; (d) performing linear PCR on the cological where only a single primer is used; (d) obtaining beads coupled to an oligonucleotide molecule complementary to the complete target nucleic acid molecule complementary to the camplified target nucleic acid molecules; (e) forming a mixture by mixing the beads and the enriched linear PCR product nucleic acid molecule, the enriched linear PCR product includes the target nucleic acid molecule, the enriched linear PCR product will hybridise to the oligonucleotide confluorescence on the beads analysed; and (h) detecting a level of fluorescence on the beads, where the level of fluorescence corresponds to a level of a target nucleic acid molecule in the biological sample. The method for simultaneously detecting the presence of multiple target nucleic acid molecule in the biological sample. The method for simultaneously detecting the presence of multiple target nucleic acid molecule in the biological sample. ACR39439 to ACR39597 represent primers and probes used in the ACR340.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Simultaneously detecting the presence of multiple target nucleic acid molecules in a biological sample for optimizing risk-adapted therapy for a disorder by treating the enriched target nucleic acid molecules with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                           Simultaneous detection, multiple target nucleic acid molecule; biological sample; Exonuclease I; PCR; human papillomavirus; HPV; backoute. lymphoblastic leukaemia; cancer; assay; bead array coded detection of multiple target; microarray; targeted genetic risk-stratification; primer; probe; ss.
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Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                                        Acute lymphoblastic leukaemia assay related primer #12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19 BP; 4 A; 2 C; 10 G; 3 T; 0 U; 0 Other;
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ACF39450/c
ID ACF39450 standard; DNA; 19 BP.
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05-NOV-2002; 2002US-0423793P.
                                                                                                                                                                                                                                                                                                                                                                                                                                   06-DEC-2002; 2002WO-US039223
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                                                                                                    (first entry)
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Best Local Similarity 84.2.
Local 16; Conservative
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                                                                                                                                                                                                                                                                                                           Synthetic
                                                           ACF39450;
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Gaps

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388 TCCTCGGATGAGGTGCAGT 406

84.2%;

16; Conservative

Matches

Local Similarity

19 rccrcrcaggargradar 1

RESULT 903

RESULT 904

ACH03516

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The invention relates to the novel use of irinotecan to treat a patient suffering from cancer. This involves determining if the patient has one or more variant alleles of the UGTIAI gene, and if the patient has one or more of such variant alleles, irinotecan is administered in an increased or decreased amount in comparison to the amount that is administered without regard to the patient's alleles in the UGTIAI gene. The invention has cytostatic activity. A composition of the invention acts as a topoisomerase I inhibitor. The method is useful for treating a patient,
                                                                                                                                                                                                                                                                                                          Use of irinotecan to treat cancer patient by determining if patient has variant alleles of UGTIAl gene, administering increased/decreased amounts of irinotecan based on increased/decreased levels of UGTIAl gene product.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           an animal e.g. mouse or a human, preferably African or Asian, suffering from cancer such as colorectal, cervical, gastric cancer, lung, ovarian, pancreatic cancer or malignant glioma. The present sequence is udes in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         colorectal cancer; cervical cancer; gastric cancer; lung cancer; ovarian cancer; pancreatic cancer; malignant glioma; uridine diphosphate glycosyltransferasel member Al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human UGT1A1 variant allele sequence fragment SEQ ID NO:441.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.4e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                       (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 58; 107pp; English.
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                                                            23-JUL-2002; 2002WO-EP008217.
                                                                                                      23-JUL-2001; 2001EP-00117608.
24-MAY-2002; 2002EP-00011710.
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24-MAY-2002; 2002EP-00011710.
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Best Local Similarity 84.2*
Thes 16; Conservative
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                                                                                                                                                                                                                                                                WPI; 2003-289896/28.
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                  20-FEB-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diagnosing or treating subjects at risk for or having eye disease, e.g. Primary Open-Angle Glaucoma, ocular hypertension, or elevated intraocular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention describes a new composition, which comprises an isolated Latrophilin (LPH) nucleic acid. The compositions are useful for diagnosing or treating subjects at risk for or having eye disease, e.g. Primary Open-Angle Glaucoma (e.g. juvenile onset or adult onset), ocular hypertension, or elevated intraocular pressure. This sequence represents a primer associated with isolation of human latrophilin 3 (LPH3)
                                                                                                                                                                                                          Human; latrophlin 3; LPH3; ophthalmological; hypotensive; gene therapy;
eye disease; primary open-angle glaucoma; ocular hypertension;
elevated intraocular pressure; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor; colorectal cancer; cervical cancer; gastric cancer; lung cancer; ovarian cancer; pancreatic cancer; malignant glioma; uridine diphosphate glycosyltransferasel member A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New Latrophilin (LPH) polynucleotides and polypeptides, useful for
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84.2%; Pred. No. 8.4e+02;
ative 0; Mismatches 3; Indels
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                                                                                                                                                                   Human latrophlin 3 (LPH3) associated primer #58.
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                                     ACH03516 standard; DNA; 19 BP.
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Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Richards JE, Rozsa FW;
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                                                                                                                           25-SEP-2003
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                                                                               ACH03516;
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RESULT 905

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Gaps

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WPI; 2003-289896/28
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Use of irinotecan to treat cancer patient by determining if patient has variant alleles of UGTIAl gene, administering increased/decreased amounts of irinotecan based on increased/decreased levels of UGTIAl gene product. Disclosure; Page 58; 107pp; English

The invention relates to the novel use of irinotecan to treat a patient suffering from cancer. This involves determining if the patient has one or more variant alleles of the UGTIAl gene, and if the patient has one or more of such variant alleles, irinotecan is administered in an increased or decreased amount in comparison to the amount that is administered without regard to the patient's alleles in the UGTIAl gene. The invention has cytostatic activity. A composition of the invention acts as a topoisomerase I inhibitor. The method is useful for treating a patient, an animal e.g. mouse or a human, preferably African or Asian, suffering from cancer such as colorectal, cervical, gastric cancer, lung, ovarian, pancreatic cancer or malignant glioma. The present sequence is udes in the exemplification of the invention.

Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02; iive 0; Mismatches 3; Indels 388 TCCTCGGATGAGGTGCAGT 406 Conservative Best Local Similarity Matches 16; Conserv Query Match ò

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Gaps

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1 TCCTCTGAGGATGTGCAGT 19 g

ADB97384 standard; DNA; 19 04-DEC-2003 ADB97384; ACRESULT 907
ACRESULT 907
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Human MDR1 variant allele sequence fragment SEQ ID NO:470. (first entry)

irinotecan; colorectal cancer; cervical cancer; gastric cancer; lung cancer; ovarian cancer; pancreatic cancer; malignant glioma; multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;

Homo sapiens.

WO2003013537-A2.

20-FEB-2003

23-JUL-2002; 2002WO-EP008218.

23-JUL-2001; 2001EP-00117608. 24-MAY-2002; 2002EP-00011710 (EPID-) EPIDAUROS BIOTECHNOLOGIE AG

Kerb R; Heinrich G,

WPI; 2003-268145/26.

New use of irinotecan for preparation of pharmaceutical compositions for treating cancer in subject having genome with variant allele comprising multidrug resistance 1 polynucleotide.

Claim 1; Page 82; 130pp; English

The invention relates to the novel use of irinotecan or its derivative for the preparation of pharmaceutical compositions for treating

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colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant gliona in a subject having a genome with a variant allele which comprises a multidrug resistance I (MDRI) polymucleotide. A composition of the invention has cytostatic activity. The invention is useful for the preparation of pharmaceutical compositions for treating colorectal, elevical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject (preferably human, more preferably African or Asian) or a mouse. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                        irinotecan; colorectal cancer; cervical cancer; gastric cancer; lung cancer; ovarian cancer; pancreatic cancer; malignant glioma; multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
                                                                                                                                                                            Gaps
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                                                                                                                                                  Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                  Human MDR1 variant allele sequence fragment SEQ ID NO:469.
                                                                                                                             Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                      388 TCCTCGGATGAGGTGCAGT 406
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84.2%;
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                                                                                                                                                                  Local Similarity 84.2
nes 16; Conservative
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                                                                                                     invention
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The invention relates to the novel use of irinotecan or its derivative for the preparation of pharmaceutical compositions for treating colorectal, cervical, gastric, lung, ovarian or pencreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a multidrug resistence 1 (MDR1) polynucleotide. A composition of the invention has cytostatic activity. The invention is useful for the preparation of pharmaceutical compositions for treating colorectal, cervical, gastric, lung, ovarian or maiore preferably African or Malignant glioma in a subject (preferably human, more preferably African or Asian) or a mouse. The present sequence is used in the exemplification of the

New use of irinotecan for preparation of pharmaceutical compositions for treating cancer in subject having genome with variant allele comprising multidrug resistance 1 polynucleotide.

Claim 1; Page 82; 130pp; English.

(EPID-) EPIDAUROS BIOTECHNOLOGIE AG.

Heinrich G, Kerb R; WPI; 2003-268145/26.

23-JUL-2002; 2002WO-EP008218. 23-JUL-2001; 2001EP-00117608. 24-MAY-2002; 2002EP-00011710. BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other; Sequence 19

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Human MDR1 variant allele sequence fragment SEQ ID NO:469.
                                                                                  WO2003013535-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003072590-A1.
                                                                                                                                              23-JUL-2001;
24-MAY-2002;
                                                               Homo sapiens
                                                                                                                                                                                                 Heinrich G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-JAN-2004
                                                                                                      20-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-SEP-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADE29746;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 911
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                                                                                                                                                                                                                                                                                                                                                                                                                  New use of irinotecan for preparation of pharmaceutical compositions for treating cancer in subject having genome with variant allele comprising multidrug resistance 1 polynucleotide.
                                                                                                                                                                                              irinotecan; colorectal cancer; cervical cancer; gastric cancer;
lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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0
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.2; DB 1; Length 19; 34.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels
Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                                                                           Human MDR1 variant allele sequence fragment SEQ ID NO:470.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                      (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 8; Page 54; 104pp; English.
                                         388 ICCICGGAIGAGGIGCAGI 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            388 TCCTCGGATGAGGTGCAGT 406
                                                            rccrcrdaggargrgcagr 19
                                                                                                                BP.
0.8%;
                                                                                                                                                                                                                                                                                                   23-JUL-2002; 2002WO-EP008220.
                                                                                                                                                                                                                                                                                                                        23-JUL-2001; 2001EP-00117608.
24-MAY-2002; 2002EP-00011710.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84.28;
                                                                                                               ADB92575 standard; DNA; 19
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                                                                                                                                                       (first entry)
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                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                          Heinrich G, Kerb R;
                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-342400/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADB92574 standard;
          Similarity
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Les 16; Conserv
                                                                                                                                                                                                                                                           WO2003013535-A2
                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                       04-DEC-2003
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                    16;
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                                                                                                                                  ADB92575;
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 Query Match
          Best Local
Matches 1
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Matches
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ID ADB9
XX
AC ADB9
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DT 04-D
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comprises
irinotecan; colorectal cancer; cervical cancer; gastric cancer; lung cancer; ovarian cancer; pancreatic cancer; malignant glioma; multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New use of irinotecan for preparation of pharmaceutical compositions for treating cancer in subject having genome with variant allele comprising multidrug resistance 1 polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a multidrug resistance I (MDR1) polynucleotide. A composition of the invention has cytostatic activity. The present sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates ro a novel use of irinotecan or its derivative for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidiabetic; antidiamatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      genetic engineering; pharmacogenomic; gene mapping; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 8; Page 54; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  388 TCCTCGGATGAGGTGCAGT 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                        23-JUL-2002; 2002WO-EP008220.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001EP-00117608.
2002EP-00011710.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kerb R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-342400/32.
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that downregulates expression of a mitogen-activated protein kinase modulating expression of Mapk genes by RNA interference. Also described: (1) a method for modulating expression of Mapk genes in cells, tissue explants or crganisms by introduction of Mapk genes in cells, tissue explants or organisms by introduction of SiNA; (2) kits for in vitro or in vivo delivery of SiNA; (3) conjugates and/or complexes of SiNA; and (4) corpusted that express siNA and cells containing these vectors. Mapk siNAs have cytostatic, ancretic, antidabetic, antinflammatory.

In an idea to modulate the expression of Mapk genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I can li a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogaenomics; identification and validation; genetic engineering; pharmacogaenomics;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents a MAPK siNA which is used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present invention describes a short interfering nucleic acid (siNA)
                                                                                                                                                                                                                                                                                                                                                                      New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated
                                                                                                                                                                                                                                                                             Chowrira B;
                                                                                                                                                                                                                                                                           Mcswiggen J, Beigelman L, Usman N, Haeberli P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 2 A; 4 C; 7 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 3; SEQ ID NO 368; 164pp; English.
                                                                                                                                                                                                                                  (SIRN-) SIRNA THERAPEUTICS INC
                                                                                                         29-AG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0409293P.
15-JAN-2003; 2003US-0440129P.
                                                                   2002US-0363124P.
2002US-0386782P.
28-JAN-2003; 2003WO-US002510
                                             2002US-0358580P
                                                                                                                                                                                                                                                                                                                                                                                                                      protein kinase genes.
                                                                                                                                                                                                                                                                                                                           WPI; 2003-689980/65.
                                                20-FEB-2002;
                                                                                           06-JUN-2002;
                                                                     11-MAR-2002;
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0
                             Gaps
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0
0.8%; Score 14.2; DB 1; Length 19; 57.9%; Pred. No. 8.4e+02; iive 5; Mismatches 3; Indels
                             11; Conservative
                Similarity
                 Local
                             Matches
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Mitogen activated protein kinase sina oligonucleotide SEQ ID NO:473.
1156 ATGTGGGGTGTGGGCTGCA 1174
                                                                                          1 AUCUGGUCUGUGGGCUGCA 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADE29851 standard; RNA; 19
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ADE29851/C
ID ADE2985X
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XX
DT 29-JAN
DE Mitoge
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KW Short
KW COLOST
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short interfering nucleic acid; siNh; downregulation; inhibition, mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; athma; septic shock; theumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; pentitis; genetic engineering; pharmacogenomic; gene mapping; ss.

Synthetic

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have cytostatic, anorectic, antidiabetic, antiinflammatory, antiathmatic, immunosuppressive, antidiabetic, antiinflammatory, antiasthmatic, immunosuppressive, antidabeterial, antinheumatic, antiasthmatic, antipsoriatic and gastrointestinal activities. The MAPK sinks can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I septic shock, rheumatoid arthritis, psoriasis and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents a MAPK siNA which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  that downregulates expression of a mitogen-activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of siNA; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA, and (4) vectors that express siNA and cells containing these vectors. MAPK siNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acid (siNA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       short interfering nucleic acid, siNA, downregulation; inhibition, mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidiabetic; antidialmamatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
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                                                                                                                                                                                                                                                                                                                                                                                                            short interfering nucleic acid, useful e.g. for treatment and mosis of cancer, downregulates expression of mitogen-activated
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                                                                                                                                                                                                                                                                                                                                    B)
                                                                                                                                                                                                                                                                                                                                    Chowrira
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                    Haeberli P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19 BP; 6 A; 7 C; 4 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; SEQ ID NO 473; 164pp; English.
                                                                                                                                                                                                                                                                                                                                    Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1156 ATGTGGGGTGTGGCTGCA 1174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 ATCTGGTCTGTGGGCTGCA 1
                                                                                                                                                                                                                                                                                             (SIRN-) SIRNA THERAPEUTICS INC
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                                                                                                                                                                                         29-AUG-2002; 2002US-0406784P.
05-SFP-2002; 2002US-0408378P.
09-SFP-2002; 2002US-0409293P.
15-JAN-2003; 2003US-0440129P.
                                                                                            28-JAN-2003; 2003WO-US002510.
                                                                                                                                                    2002US-0363124P.
2002US-0386782P.
                                                                                                                                                                                                                                                                                                                                    Mcswiggen J, Beigelman L,
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nes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein kinase genes.
                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-689980/65.
              WO2003072590-A1
                                                                                                                                                                         06-JUN-2002;
                                                                                                                                                      11-MAR-2002;
                                                     04-SEP-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                       diagnosis
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New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated
                                               inflammatory disease, asthma, septic shock; rheumatoid arthritis, psoriasis, inflammatory bowel disease, drug screening, genetic engineering, pharmacogenomic, gene mapping, ss.
                                                                                                                                                                                                                                                       Mcswiggen J, Beigelman L, Usman N, Haeberli P,
                                                                                                                                                                                                                                                                                                                              Example 3; SEQ ID NO 463; 164pp; English.
2 13:39:09 2004
                                                                                                                                                                                                                                     (SIRN-) SIRNA THERAPEUTICS INC.
                                                                                                                                                                                      2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
                                                                                                                                                                      2002US-0363124P.
2002US-0386782P.
                                                                                                                                           28-JAN-2003; 2003WO-US002510
                                                                                                                                                                                                                  2003US-0440129P
                                                                                                                                                                                                                                                                                                             protein kinase genes.
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                                                                                                       WO2003072590-A1.
                                                                                                                                                                                      29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
                                                                                                                                                                               06-JUN-2002;
                                                                                                                                                                                                                  15-JAN-2003;
                                                                                                                                                                      11-MAR-2002;
                                                                                                                         04-SEP-2003
                                                                                     Synthetic
Tue Nov
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Chowrira B;

the property in the property of the present expression of the present invention. The present invention describes a short interfering nucleic acid (siNA)

Sequence 19 BP; 3 A; 2 C; 9 G; 0 T; 5 U; 0 Other;

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Gaps
                                         0
     0.8%; Score 14.2; DB 1; Length 19; 14.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels
                                                                        985 AAGCCCCAGAACCTGCTCA 1003
Query Match
Best Local Similarity 84.2%;
Matches 16; Conservative
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0

AAGCCCTCCAACCTGCTCA 19

g

ADE29736 standard; RNA; 19 BP 29-JAN-2004 (first entry) ADE29736; RESULT 914 ADE29736 XAXAXAX

Mitogen activated protein kinase sinA oligonucleotide SEQ ID NO:358.

short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidiabetic; antinflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; heumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss. Chowrira B; Haeberli P, Usman N, (SIRN-) SIRNA THERAPEUTICS INC. 2002US-0358580P. 2002US-0363124P. 2002US-0386782P. 2002US-0406784P. 2002US-0409293P. 2003US-0440129P. 28-JAN-2003; 2003WO-US002510 Mcswiggen J, Beigelman L, WO2003072590-A1. 29-AUG-2002; 05-SEP-2002; 09-SEP-2002; 15-JAN-2003; 20-FEB-2002; 11-MAR-2002; 06-JUN-2002; 04-SEP-2003. Synthetic.

New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated protein kinase genes. WPI; 2003-689980/65.

Example 3; SEQ ID NO 358; 164pp; English.

modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of siNA, (2) kits for in vitro or in vivo delivery of siNA, (3) conjugates and/or complexes of siNA, and (4) vectors that express siNA and cells containing these vectors. MAPK siNAs have cytostatic, anciett, antidabetic, antinflammatory, antiasthmatic, immunosuppressive, antibacterial, antirheumatic, antiasthmatic, immunosuppressive, antibacterial, antirheumatic, immunosuppressive, antibacterial, antitheumatic, the MAPK siNAs antiathritic, antipsociatic and gastrointestinal activities. The MAPK siNAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes types I and II; a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening, diagnosis, target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents a MAPK siNA which is used The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of a mitogen-activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for n the exemplification of the present invention.

Score 14.2; DB 1; Length 19; Pred. No. 8.4e+02; Sequence 19 BP; 5 A; 9 C; 2 G; 0 T; 3 U; 0 Other; Match 0.8%; Local Similarity 73.7%; Query Match

0

Gaps

·:

Indels

2; Mismatches

14; Conservative

Matches

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ADE29735 standard; RNA; 19 BP. ADE29735

ADE29735; a X X short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein Kinase; MAP Kinase; MAPK; RNA interference; exprostratic; anorectic; antidiabetic; antiinflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiasthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.

Mitogen activated protein kinase sinA oligonucleotide SEQ ID NO:462.

(first entry)

29-JAN-2004

ADE29840;

ADE29840 standard; RNA; 19 BP.

RESULT 916 ADE29840,

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The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of a mitogen-activated protein kinase (WAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or coganisms by introduction of siNA; (2) kits for in vitro or in vivo coganisms by introduction of siNA; (2) kits for in vitro or in vivo cells. An expression of MAPK (2) kits for in vitro or in vivo cells. An expression and (4) and cells containing these vectors. MAPK siNAs care cytostatic, anorectic, antibacterial, antirheumatic, antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK siNAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I complication and validation; genetic engineering; diagnosis; target disease). They can also be used for drug screening; diagnosis; target complification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide copinemaphisms). The present sequence represents a MAPK sinA which is used in the exemplification of the present invention.
                                                                                                                                         short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic; immunosuppressive; artibacterial; antirheumatic; antiarthritic; antiporiatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.
                                                                           Mitogen activated protein kinase sinA oligonucleotide SEQ ID NO:357.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated protein kinase genes.
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88.4%; Pred. No. 8.4e+02;
ve 3; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Beigelman L, Usman N, Haeberli P,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; SEQ ID NO 357; 164pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
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Best Local Similarity 68.4°
Matches 13; Conservative
29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-689980/65.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-JUN-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
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The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of a mitogen-activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or corganisms by introduction of siNA; (2) kits for in vitro or in vivo delivery of siNA; (3) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; and (4) vectors that express siNA and cells containing these vectors. MAPK siNAs can express siNA and cells containing these vectors. MAPK siNAs can explantic, immunosuppressive, antibacterial, antirheumatic, antisoriatic and gastrointestimal activities. The MAPK siNAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I cand II; a wide range of tumours, and inflammatory diseases (asthma, ceptic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target containing men and validation; genetic engineering; pharmacogeneous containing men and validation; genetic engineering; pharmacogeneous containing men function and gene mapping (e.g. of single-nucleotide coplymorphisms). The present expresents a MAPK siNA which is used in the exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 3; SEQ ID NO 462; 164pp; English.
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Matches 16; Conservative
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Gaps

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68.48;

New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated protein kinase genes.

Chowrira B;

Haeberli P,

Mcswiggen J, Beigelman L, Usman N, (SIRN-) SIRNA THERAPEUTICS INC.

WPI; 2003-689980/65.

15-JAN-2003; 2003US-0440129P.

2002US-0408378P 2002US-0409293P

06-JUN-2002; 05-SEP-2002;

20-FEB-2002; 11-MAR-2002;

2002US-0363124P. 2002US-0386782P.

2002US-0358580P

28-JAN-2003; 2003WO-US002510.

WO2003072590-A1.

Synthetic.

04-SEP-2003.

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                                                                                                                                                                                                                                                                 short interfering nucleic acid, sinkly downregulation; vascular endothalial growth factor receptor; VEGFR, antiangiogenic; cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; nephrotroppic, gynaecological; angiogenesis-associated condition; cancer; diabetic retinopathy; macular degeneration; neovascular glaucoma; arthritis; psoriasis; endometriosis; angiofibroma; polycystic kidney disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    double-stranded interfering nucleic acid, useful e.g. for treatment diagnosis of cancer, downregulates the vascular endothelial growth
                                                                                                                                                                                                                        Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1680.
                                                                                                                                                                                                                                                        double-stranded short interfering nucleic acid;
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967 GTGCTACACCGAGACCTCA 985
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                   GIGCTCCACCGAGATCTAA 1
                                                                                                                        ВР
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2002US-0393796P.
2002US-0399348P.
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2002US-0408378P.
2002US-0409293P.
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                                                                                                                  ADF37391 standard; RNA; 19
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                                                                                                                                                                                        (first entry)
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03-JUL-2002;
29-JUL-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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11-MAR-2002;
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05-SEP-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                      ADF37391;
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                                                                                  RESULT 917
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                                                                                                                                                                                                                                                                                                                                                                                                          double-stranded short interfering nucleic acid; short interfering nucleic acid; siNA; downregulation; sent interfering nucleic acid; siNA; downregulation; vascular endothelial growth factor receptor; VEGFR; antiangiogenic; cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; diabetic retinopsthy; macular degeneration; neovascular glaucoma; arthritis; psoriasis; andometriosis; angiofibroma; polycystic kidney disease; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes a double-stranded short interfering nucleic acid (siNA) that downregulates expression of the vascular endothelial growth factor receptor (VEGFR) gene. Also described: (1) a siNA, that downregulates the VEGF gene; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates the vascular endothelial growth
                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                               Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:615.
     mapping
is used
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                                                                                                  Length 19;
                                                                                               Score 14.2; DB 1; Length 1
Pred. No. 8.4e+02;
4; Mismatches 3; Indels
engineering, studying gene function, and also for gene single-nucleotide polymorphisms). The present sequence exemplification of the present invention.
                                                                  Sequence 19 BP; 2 A; 6 C; 6 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 3; SEQ ID NO 615; 207pp; English.
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                                                                                                                                                                 1036 TTTGGCCTGGCCCGAGCCA 1054
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29-MAY-2002; 2002MU-02017674,
06-UJN-2002; 2002US-0386782P.
03-UJL-2002; 2002US-0393348P.
29-MJU-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0406784P.
                                                                                                                                                                                                                                                                                 BP
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2002US-00287949.
2002US-00306747.
                                                                                                  0.8%;
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                                                                                                                63.2%;
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                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                 l Similarity 63.2
12; Conservative
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04-NOV-2002;
27-NOV-2002;
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                                                                                               Query Match
Best Local {
                                                                                                                                                                                                                                                 RESULT 918
                                                                                                                                 Matches
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double-stranded short interfering nucleic acid; short interfering nucleic acid; siNA; downregulation; vascular endothelial growth factor receptor; VEGFR; antiangiogenic; cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; nephrotropic; gynaecological; angiogenesis-associated condition; cancer; nebhrotres retinopathy; macular degeneration; neovascular glaucoma; arthritis; psoriasis; endometriosis; angiofibroma; polycystic kidney disease; ss.
that express siNa, and (5) single-stranded siNa with similar properties. The siRas have antianglogenic, cytostatic, antidabetic, ophthalmological, antiarthritic, antipostriatic, nephrotropic and gynaecological activities. The siNa are useful for modulating (downregulating) the expression of VEGFR genes. The siNa are potentially useful for treating a wide range of angiogenesis-associated conditions, particularly cancers, diabetic retinopathy, macular degeneration, necovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma, and polycystic kidney disease. The siNa may also be useful for diagnosis, drug screening, target identification and validation, genetic engineering, studying gene function, and also for gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence is used in the exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.48+02;
.ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19 BP; 6 A; 7 C; 5 G; 0 T; 1 U; 0 Other;
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29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0409293P.
04-NOV-2002; 2002US-00287949.
27-NOV-2002; 2002US-00306747.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 GATTTTGGCCTTGCCCGGG 1
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2002WO-US017674.
2002US-0386782P.
2002US-0393796P.
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XX

ADF37638;

XX

ADD16-stranded short interfering color acid was accorded endothelial growth farmy by a contained endothelial growth farmy and abetic retinopathy; macular was archaritis; psoriasis; endometrix was wolvessed; solvessed; endometrix was archaritis; psoriasis; endometrix was archaritis; psoriasis; endometrix was archaritis; psoriasis; endometrix was archaritis; endometrix endometrix was archaritis; endometrix endometrix was archaritis; endometrix endometrix was archaritis; endometrix end
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
nes 16; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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nucleic acid (siMa) that downregulates expression of the vascular endothelial growth factor receptor (VEGFR) gene. Also described: (1) a siMa that downregulates the VEGF gene; (2) kits for in vitro or in vivo delivery of siMa; and (5) single-stranded siMa with similar properties. The siMas have antiangiogenic, cytostatic, antidiabetic, ophthalmological, antiathritic, antipsoriatic, nephrotropic and gynaecological activities. The siMa are useful for modulating (downregulating) the expression of VEGFR genes. The siMa are potentially useful for treating a wide range of angiogenesis-associated conditions, particularly cancers, diabetic retinopathy, macular degeneration, neovascular glaucoma, arthritis, psoriasis, endometriosis, angictibroma, and polycystic kidney disease. The siMa may also be useful for diagnosis, and polycystic kidney disease. The siMa may also be useful for diagnosis, dung screening, studying gene function, and also for gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence is used in the exemplification of the present invention. ö double-stranded short interfering nucleic acid; short interfering nucleic acid; siNA; downregulation; vascular endothelial growth factor vegory vegory, used antidabetic; orthogonal, antiarthritic; antipsoriatic; cytostatic; antidabetic; ophlalmological; antiarthritic; antipsoriatic; nephrotropic; gynaecological; angiogenesis-associated condition; cancer; diabetic retinopathy; macular degeneration; neovascular glaucoma; arthritis; psoriasis; endometriosis; angiofibroma; and diagnosis of cancer, downregulates the vascular endothelial growth Gaps invention describes a double-stranded short interfering Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:188 .. 0.8%; Score 14.2; DB 1; Length 19; 14.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels Sequence 19 BP; 5 A; 6 C; 6 G; 0 T; 2 U; 0 Other; Example 3; SEQ ID NO 1927; 207pp; English. 1036 TTTGGCCTGGCCCGAGCCA 1054 2002US-0406784P. 2002US-0408378P. 2002US-0409293P. 2002US-00287949. ADF35899 standard; RNA; 19 BP. 2002WO-US017674. 19 TTTGGCCTTGCCGGGACA 20-FEB-2003; 2003WO-US005022 2002US-0363124P 2002US-0386782P 2002US-0393796P 2002US-0399348P 84.28; (first entry) 16; Conservative factor receptor gene Local Similarity WO2003070910-A2. 05-SEP-2002; 09-SEP-2002; 04-NOV-2002; Homo sapiens. 06-JUN-2002; 29-MAY-2002; 03-JUL-2002; 29-JUL-2002; 12-FEB-2004 The present 28-AUG-2003 Synthetic Query Match RESULT 920 Matches ADF35899 à qq

Ruben SM;

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Lafleur DW, Moore PA,
                                        WPI; 2003-381702/36.
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ADF84085
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                                                                                                                                                                                                            uncleic acid (sink) that downregulates expression of the vascular.

cndothelial growth factor receptor (WEGFR) gene. Also described: (1) a
cndothelial growth factor receptor (WEGFR) gene. Also described: (1) a
cndothelial growth factor receptor (WEGFR) gene. Also described: (1) a
chat express sink, and (5) single-stranded sink with similar properties.

The sinks have antianglogenic, cytostatic, nephrotropic and
copthalmological, antiatrhritic, antipsoriatic, nephrotropic and
gynaecological activities. The sink are useful for modulating
commercial the expression of VEGFR genes. The sink are potentially
useful for treating a wide range of angiogenesis-associated conditions,
particularly cancers, diabetic retinopathy, macular degeneration,
covascular glaucoma, arthritis, psoriasis, endometriosis, angiotibroma,
and polycystic kidney disease. The sink any also be useful for diagnosis,
drug screening, target identification and validation, genetic
engineering, studying gene function, and also for gene mapping (e.g. of
slingle-nucleotide polymorphisms). The present sequence is used in the
exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human keratinocyte derived interferon; human KDI; agonist; antagonist; inding partner identification; immune-related disorder; cancer; viral infection; viral exposure; immunomdulator; virucide; cytostatic; gene therapy; interferon alpha 2; expression analysis; quantitative PCR;
                                                                                                                    New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates the vascular endothelial growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                  present invention describes a double-stranded short interfering
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.2; DB 1; Length 19; 33.2%; Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 19 BP; 1 A; 5 C; 7 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Mismatches
                                                                                                                                                                        Example 3; SEQ ID NO 188; 207pp; English.
                                                                  Mcswiggen J, Beigelman L, Pavco P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1033 GACTTTGGCCTGGCCCGAG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAUTUTUGGCCUUGCCCGGG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADF95015 standard; DNA; 19 BP
27-NOV-2002; 2002US-00306747.
15-JAN-2003; 2003US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-JUL-2001; 2001US-0090B594.
06-DEC-2001; 2001US-0336165P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63.2%;
                                        (RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 63.2
Matches 12; Conservative
                                                                                                                                                 factor receptor gene.
                                                                                           WPI; 2003-679876/64
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                                                                                                                                                                                           The invention relates to human keratinocyte derived interferon (KDI; ADF94966) and nucleic acids encoding it (ADF94965). The KDI gene is located on chromosome 922. The invention also relates to sequences at least 70% identical to the KDI nucleic acid and protein sequences; a polypeptide comprising an epitope-bearing portion of KDI; recombinant vectors and host cells comprising a KDI nucleic acid sequence; a method for the recombinant expression of KDI nucleic acid sequence; a method for the recombinant expression of KDI nucleic acids or proteins for treating medical conditions; a method for the diagnosis of a pathological condition or susceptibility to a pathological condition, and methods of screening for KDI binding partners. The KDI polypeptides and polynucleoides, and methods of the invention are useful for preventing, treating or ameliorating a medical condition, such as an immune-related
New isolated keratinocyte derived interferon (KDI) polypeptide, useful for preventing, treating or ameliorating a medical condition, such as an immune-related disorder, a viral infection, a viral exposure or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disorder, cancer, or a viral infection or viral exposure. The present sequence is related to the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                Example 5; SEQ ID NO 51; 398pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            926 TCCAGCTGCTCGTGGCCT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  || |||||||||| |||| ||| || TCAAGCTGCTCTGTGGGGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADF84085 standard; RNA; 19 BP.
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2002US-0408378P.
2002US-0409293P.
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2002US-0386782P.
2002US-0404039P.
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06-JUN-2002;
15-AUG-2002;
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05-SEP-2002;
09-SEP-2002;
14-JAN-2003;
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treatment

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nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human BCR-targeted siRNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                           New double-stranded interfering nucleic acid, useful e.g. for treatme and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leuxaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leuxaemia; lymphoma; human; BCR; ss; siRNA.
                                                                                                                                       The invention relates to a novel double-stranded short interfering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human breakpoint cluster region-targeted siRNA - SEQ ID 494.
                                                                                                                                                                                                                                                                                                                           Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                              Sequence 19 BP; 3 A; 3 C; 11 G; 0 T; 2 U; 0 Other;
                                                                                                          Example 7; SEQ ID NO 379; 197pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                         228 GAGTGGTGGTGGCGGC 246
                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGGUGGUGGCAGCGGC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADF84200 standard; RNA; 19 BP
                                                                                                                                                                                                                                                                                                                              0.8%;
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2002US-0406784P.
2002US-0408378P.
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                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 73.7
Matches 14; Conservative
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                WPI; 2003-679889/64
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29-AUG-2002;
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06-JUN-2002;
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Example 7; SEQ ID NO 494; 197pp; English

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Gaps

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           The invention relates to a novel double-stranded short interfering mucleic acid (shNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cycostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene, function studies and gene mapping. The current sequence is that of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel double-stranded short interfering nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
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                                                                                                                                                                                                                                Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                 Sequence 19 BP; 2 A; 3 C; 9 G; 0 T; 5 U; 0 Other;
                                                                                                                                                             the human BCR-targeted siRNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 7; SEQ ID NO 610; 197pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human ABL1-targeted siRNA - SEQ ID 610.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chowrira B;
                                                                                                                                                                                                                                                                                                             673 AGCAAGCTCACAGACAACC 691
                                                                                                                                                                                                                                                                                                                                              19 AGCAAGCTCCCTGCCAACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-AUG-2002; 2002US-0404039P.
29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0409293P.
                                                                                                                                                                                                                                  0.8%;
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2002US-0386782P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         ADF84316 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                     Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
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11-MAR-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 924
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452 CCACTGAGGACATCAACAA 470
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint
 The current sequence is that of
                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                          short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ch 0.8%; Score 14.2; DB 1; Length 19; 1 Similarity 73.7%; Pred. No. 8.4e+02; 14; Conservative 2; Mismatches 3; Indels
                                                                                0.8%; Score 14.2; DB 1; Length 19; 2.6%; Pred. No. 8.4e+02;
                                                                                                                  Indels
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                                               Sequence 19 BP; 3 A; 3 C; 6 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the human ABL1-targeted siRNA of the invention.
 gene function studies and gene mapping. The cur
the human ABL1-targeted siRNA of the invention.
                                                                                                                6; Mismatches
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                                                                                                                                                                                                                                                                                                                                                             Human ABL1-targeted siRNA - SEQ ID 732.
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                                                                                                                                                1025 AGCTGGCTGACTTTGGCCT 1043
                                                                                                                                                                   AGGUAGCUGAUUTUGGCCU 19
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2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
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2002US-0386782P.
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                                                                                               52.6%;
                                                                                                                                                                                                                                                               ADF84438 standard; RNA; 19
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                                                                                                                                                                                                                                                                                                                            (first entry)
studies and
                                                                                             Best Local Similarity 52.6
Matches 10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003070972-A2.
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05-SEP-2002;
09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
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06-JUN-2002;
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                                                                                 Query Match
                                                                                                                                                                                                                             RESULT 925
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The invention relates to a novel double-stranded short interfering nucleic acid (siNA) that downregulates expression of the breakpoint cluster region—val Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human ABL1-targeted siRNA of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                       Human ABL1-targeted siRNA - SEQ ID 1051.
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CCACUCAGGACUUCAGCAA 19
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06-UTV-2002; 2002US-0363124P.

15-AUG-2002; 2002US-0404039P.

29-AUG-2002; 2002US-0406784P.

05-SEP-2002; 2002US-0408378P.

04-SEP-2002; 2002US-0408378P.

14-UAN-2003; 2003US-0439922P.
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14-JAN-2003; 2003US-0439922P.
15-JAN-2003; 2003US-0440129P.
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Best Local Similarity
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ADF83937
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Query Match Best Local Similarity Matches 14; Conserv

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
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                                                                                                            short interfering nucleic acid, siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; BCR; ss; siRNA.
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                                                                                     Human breakpoint cluster region-targeted siRNA - SEQ ID 231.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 14.2; DB 1;
Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Mismatches
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11-WAR-2002; 2002US-0363124P.

6-UUN-2002; 2002US-036782P.

15-AUG-2002; 2002US-0406784P.

29-AUG-2002; 2002US-0406784P.

05-SEP-2002; 2002US-04093P.

14-JAN-2003; 2003US-043922P.

15-JAN-2003; 2003US-0439222P.
BP
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ADF83937 standard; RNA; 19
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                                                         (first entry)
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                                                                                                                                                                                                        WO2003070972-A2
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                                                                                                                                                                              Homo sapiens
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                             ADF83937
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ID ADF846

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The invention relates to a novel double-stranded short interfering nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human ABL1-targeted siRNA of the invention.
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short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 7 A; 6 C; 3 G; 0 T; 3 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 7; SEQ ID NO 929; 197pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                   B,
                                                                                                                                                                                                                                                                                                                                                                                                     Chowrira
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1025 AGCIGGCIGACTITGGCCT 1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19 AGGTAGCTGATTTTTGGCCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADF83822 standard; RNA; 19 BP
                                                                                                                                                                                                                                                15-AUG-2002; 2002US-0404039P.
29-AUG-2002; 2002US-0406704P.
05-SEP-2002; 2002US-0406778P.
09-SEP-2002; 2002US-0409293P.
14-JAN-2003; 2003US-0439922P.
                                                                                                                                                                                                                  2002US-0363124P.
2002US-0386782P.
                                                                                                                                                                                                                                                                                                                                    15-JAN-2003; 2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                     Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-679889/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003070972-A2
                                                                                                     WO2003070972-A2
                                                                                                                                                                    20-FEB-2003;
                                                                                                                                                                                                                    11-MAR-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                     Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-FEB-2004
                                                                                                                                    28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADF83822;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 929
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The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human platelet-derived growth factor receptor (POGFY) gene by RNA interference. The siNAs may or may not comprise ribonuclectides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are sessembled from a sense oligonuclectide and an antisense oligonuclectide. Specifically, the siNAs include short interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA, double-stranded sort of complexes and can be chemically synthesised, expressed from a cevetor or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siRNA, conjugates and/or complexes of siRNA; and vectors that express siNA. The siNAs are used to modulate expression of the PDGFr gene in cells, tissue explants or creating leukaemit of a variety of conditions. They may be used for treating leukaemia and solid tumours, restenosis, polycystic kidney disease, bronchiolitis, glomerulomephritis and stroke. The siNAs are also and sidicinal solid tumours, therapeutic target identification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          targeted double-stranded siNA, which is identical to the PDGFr transcript
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cytostatic; vasotropic; nephrotropic; cerebroprotective; treating leukaemia; solid tumors; restenosis; polycystic kidney disease; bronchiolitis; glomerulonephritis; stroke; RNA interference; short interfering mucleic acid; sinA, short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human PDGFr-
                                                                                                                                                                                                                                                                                                                                                                                                    New short interfering nucleic acid, useful e.g. for treatment and diagnosis of tumors, downregulates expression of the platelet-derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
5; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human PDGFr-targeted siNA upper strand SEQ ID NO:285.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seguence 19 BP; 2 A; 8 C; 2 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 3; SEQ ID NO 596; 148pp; English.
                                                                                                                                                                                                                                                                                                       Beigelman L, Chowrira B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1109 CCCCTGACATCCTGCTTGG 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccucucacauccuucuuge 19
                                                                     2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
     05-FEB-2003; 2003WO-US003473.
                                                      2002US-0358580P
                                                                                                                         29-AUG-2002; 2002US-0406784P
05-SEP-2002; 2002US-0408134BP
09-SEP-2002; 2002US-0499293P
15-JAN-2003; 2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       growth factor receptor gene.
                                                                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADO14854 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11; Conservative
                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-731605/69.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      target sequence.
                                                                                                                                                                                                                                                                                                       Mcswiggen J,
                                                   20-FEB-2002;
                                                                        11-MAR-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUL-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 931
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a novel double-stranded short interfering nucleic acid (shMA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murthe leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human BCR-targeted siRNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytostatic; vasotropic; nephrotropic; cerebroprotective; treating leukaemia; solid tumors; restenosis; polycystic kidney disease; bronchiolitis; glomerulonephritis; stroke; RNA interference; short interference; short interference; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; human; platelet derived growth factor receptor; PDGFr; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PDGFr-targeted siNA lower strand SEQ ID NO:596.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 2 A; 11 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 7; SEQ ID NO 116; 197pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                    Chowrira B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      228 GAGTGGTGGTGGTGGCGGC 246
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                                                                                                                                                                                            2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
2003US-0439922P.
                                                                                               2002US-0358580P.
2002US-0363124P.
2002US-0386782P.
2002US-0404039P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADO15165 standard; RNA; 19 BP
                                              20-FEB-2003; 2003WO-US005234
                                                                                                                                                                                                                                                                                                    2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                    Beigelman L,
                                                                                                                                                                                                                                                                                                                                                (RIBO-) RIBOZYME PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003072704-A2
                                                                                                                                                                   15-AUG-2002;
29-AUG-2002;
05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                    Mcswiggen J,
                                                                                                                                                                                                                                                09-SEP-2002;
                                                                                                                                                                                                                                                                       14-JAN-2003;
                                                                                                                                                                                                                                                                                                    15-JAN-2003;
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                                                                                                                                                06-JUN-2002;
                                                                                               20-FEB-2002;
                                                                                                                    11-MAR-2002;
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28-AUG-2003
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RESULT 930 ADO15165

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Matches

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Gaps . 0

Page 461

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further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the sinks include short interfering RNA (sinkA, doublestranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The sinka deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siRNA; conjugates and/or complexes of siRNA; and vectors that express siNA. The siNAs are used to modulate expression of the PDGFr gene in cells, tissue explants or organisms (e.g., by ex vivo gene therapp), or in grafts and transplants of cort the treatment of a variety of conditions. They may be used for treatment of a variety of conditions. They may be used for treatment as and solid tumours, restenosis, polycystic kidney disease, bronchiolitis, glomernlonephritis and stroke. The siNAs are also such in the conditions of such and solid tumours, restenosis, polycystic kidney and such as a su
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New short interfering nucleic acid, useful e.g. for treatment and diagnosis of tumors, downregulates expression of the platelet-derived growth factor receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to short interfering nucleic acids (siNA) which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           downregulate expression of the human platelet-derived growth factor receptor (PDGFr) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They
expression modulation; gene therapy; drug screening; diagnosis;
                               therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; human; platelet derived growth factor receptor; PDGFr; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 3; SEQ ID NO 285; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chowrira B;
                                                                                                                                                                                                                                                                                                                                                                                        20-FEB-2002; 2002US-0358580P.
11-MR-2002; 2002US-0363124P.
06-UIN-2002; 2002US-0386782P.
29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2003; 2002US-0408378P.
                                                                                                                                                                                                                                                                                                                                   05-FEB-2003; 2003WO-US003473.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-731605/69.
                                                                                                                                                                                                             WO2003072704-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mcswiggen J,
                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                        04-SEP-2003
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and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human PDGFr-targeted double-stranded siNA, which is identical to the PDGFr transcript Sequence 19 BP; 7 A; 2 C; 8 G; 0 T; 2 U; 0 Other;

Conservative

16;

Matches

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Local Similarity

Query Match

ADI26828/c ID ADI26828 standard; DNA; 19 XX RESULT 932

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New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding cyclin-dependent Kinase 4, useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer.
                                                                    cyclin-dependent kinase 4; diabetes; infertility; hyperproliferative disorder; cancer; antisense technology; mouse; PCR;
                                                             cytostatic; antidiabetic; antiinfertility; gene therapy;
                                       Mouse cyclin dependent kinase 4 primer seq id
                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                            02-JUL-2002; 2002US-00188779.
                                                                                                                                                                                                 02-JUL-2002; 2002US-00188779.
                   (first entry)
                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                          Dean NM, Freier SM,
                                                                                                                                                                                                                                                            WPI; 2004-081710/08.
                                                                                                                                   US2004005567-A1.
                   22-APR-2004
                                                                                                                                                       08-JAN-2004
                                                                                           primer; ss.
ADI26828;
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The invention describes a new antisense oligonuclectide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonuclectide is useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a primer used in the isolation of DNA encoding mouse cyclin dependent kinase 4. Example 13; SEQ ID NO 13; 90pp; English.

Gaps . 0 0.8%; Score 14.2; DB 1; Length 19; 44.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels Sequence 19 BP; 5 A; 8 C; 3 G; 3 T; 0 U; 0 Other; 84.2%; Conservative Local Similarity nes 16; Conserv Query Match Matches

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ઠ 셤 ADO18297 standard; DNA; 19 BP

RESULT 933 AD018297 AD018297

0

Gaps

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0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.48+02; tive 0; Mismatches 3; Indels

analytical chip; bacterial 16S-rRNA; genotypic characterization; probe; Analytical probe chip of the invention #56. (first entry) 15-JUL-2004 Synthetic.

WO2004033720-A2.

22-APR-2004

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                                                                                                                                                                                                                                                                                                                The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 16S-rRNA in liquid determination of one or more bacterial 16S-rRNA, cample. The chip is useful for detecting one or more bacterial 16S-rRNA, derived from bacteria such as Achromobacter xylosoxidans, Acinecobacter baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas con ydrophilia, Actinomyces israelii, Aerococcus viridans, Aeromonas con ydrophilia, Actinomyces israelii, Aerococcus viridans, Aeromonas con ydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacterococcus avium con control 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genotypic characterization in a provided sample and also enables identification of a bacterium even in a complex biological sample. The chip which is produced at reduced cost, enables determination of 165-rRNA in a sample with reduced experimental error and variation. The present sequence represents a probe of the invention used as an analytical chip.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                              Analytical chip useful for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample, comprising evanescent field measurement platform as solid carrier and several specific
                                                                                                       Utinger D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
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84.2%; Pred. No. 8.4e+02;
tive 0; Mismatches 3; Indels
                                                                                                         Jacquet JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Analytical probe chip of the invention #15.
                                                                                                     Charbonnier Y,
                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 56; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1440 TGCCATGAAACATCCATTC 1458
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                                                                                            Francois P, Char.
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24-SEP-2003; 2003WO-EP010626.
                                 09-OCT-2002; 2002EP-00022631
                                                                     (UYGE-) UNIV GENEVE HOPITAUX
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                                                                                                                          Abel A,
                                                                                                                                                                                                                                                       recognition elements.
                                                                                                                                                              WPI; 2004-375537/35
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les 16; Conserv
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                                                                                                       Schrenzel J,
Kresbach GM,
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The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 166-rRNA in liquid sample. The chip is useful for detecting one or more bacterial 165-rRNA, derived from bacteria such as Adromobacter xylosoxidans, Acinetobacter baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas hydrophilia, Agribacterium adiobacter, Bacillus sp., Bacteroides ovatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium, Escherichia coli, Flavobacterium breve, Endina and Nealla morbillorum, Gardnerella vaginalis, Hademophilus influenzae, Hafina alvei, Kingella sp., Klebsiella oxytoca Lactobactrum anthropi, Pasteurella multocida, Peptostreptococcus magnus catarrhalis, Mycobacterium avium, Neisseria cinerea, Nocardia sp., cohrobactrum anthropi, Pasteurella multocida, Peptostreptococcus magnus ochrobactrum anthropi, Shigella sonnei, Veillonella parvula, Veillonella pp. or Yersinia enterocolitica. The chip is useful for detecting clinically relevant bacteria. The chip enables determination of one or more different bacteria. The chip enables determination of one cannels rapid, accurate, essy and reliable identification of bacteria by genotypic characterization in a provided sample and also enables contains the complex bedieved the contains of the contains and also enables contains of the contains of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          chip which is produced at reduced cost, enables determination of 16S-rRNA in a sample with reduced experimental error and variation. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             in a sample with reduced experimental error and variation. The present sequence represents a probe of the invention used as an analytical chip.
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                                                                                                                                                                                      Utinger D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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                                                                                                                                                                                           Charbonnier Y, Jacquet JG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 15; 82pp; English
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Ehrat M;
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09-OCT-2002; 2002EP-00022631.
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                                                                                           (UYGE-) UNIV GENEVE HOPITAUX
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hes 16; Conservative
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Kresbach GM,
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Charbonnier Y, Jacquet JG,

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derived from bacteria such as Achromobacter xylosoxidans, Acinetobacter baumannii, Actinomyces israelii, Aerococcus viridans, Acinetobacter baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas harbinia, Agrobacterium radiobacter, Bacillus sp., Bacteroides ovatus, Campylobacter feetus, Citrobacter frendiii, Enterococcus avium nucleatum, Gemella morbilorum, Gardnerella vaginalis, Haemobhilus influenzae, Hafnia alvei, Kingella sp., Klebsiella oxytoca, Lactobacillus acidophilus influenzae, Hafnia alvei, Kingella sp., Cohrobacterium anthropi, Pasteurella multocida, Peptostreptococcus magnus, Salmonella typhi, Shigella sonnei, Veillonella parvula, Veillonella sp. ochrobacterium anthropi, Pasteurella multocida, Bectostreptococcus magnus, Salmonella typhi, Shigella sonnei, Veillonella parvula, Veillonella sp. or Versinia enterocolitica. The chip is useful for detecting clinically relevant bacteria. The chip mables determination of one or more different bacterial 165-rRNA in a liquid sample, simultaneously and enables rapid, accurate, easy and reliable identification of bacteria by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genotypic characterization in a provided sample and also enables identification of a bacterium even in a complex biological sample. The chip which is produced at reduced cost, enables determination of 16S-rRNA
                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample. The chip is useful for detecting one or more bacterial 16S-rRNA,
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                                                                                                                                                                                                                                                                different bacterial 16S-rRNA in liquid sample, comprising evanescent field measurement platform as solid carrier and several specific
                                                                                                                                                                                                                                          Analytical chip useful for simultaneous determination of one or more
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              in a sample with reduced experimental error and variation. The
                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 55; 82pp; English
                                                                                                        Francois P, Char
Abel A, Ehrat M;
  09-OCT-2002; 2002EP-00022631
                                                    (UYGE-) UNIV GENEVE HOPITAUX
                                                                                                                                                                                                                                                                                                                          recognition elements.
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                                                                                                        Schrenzel J,
Kresbach GM,
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0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02; tive 0; Mismatches 3; Indels 1441 GCCATGAAACATCCATTCT 1459 1 Grcarccarcarcarci 19 16; Conservative Query Match Best Local Similarity Matches

Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

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Gaps

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Analytical probe chip of the invention #530. ADO18771 standard; DNA; 19 BP 15-JUL-2004 (first entry) ADO18771;

analytical chip; bacterial 168-rRNA; genotypic characterization; probe;

Synthetic

WO2004033720-A2.

22-APR-2004

24-SEP-2003; 2003WO-EP010626.

09-OCT-2002; 2002EP-00022631

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The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 165-rRNA, cample. The chip is useful for detecting one or more bacterial 165-rRNA, derived from bacteria such as Achromobacter xylosoxidans, Acinetobacter bacumini, Actinomyces israelii, Aerococcus viridans, Aeromonas hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroidaes con yeatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium Campylobacter fetus, Citrobacter freundii, Enterococcus avium con yeatus, Campylobacterium action, Flavobacterium breve, CC Fusobacterium nucleatum, Gemella morbillorum, Gardnerella vaginalis, Ladtobacillus acidophilus, Legionella pneumophila, Moraxella caterialis, Mycobacterium avium, Neiseeria cinera, Nocardia sp., Colrobactum anthropi, Pasteurella multocida, Peptostreptococcus magnus CC sarartalis, Mycobacterium avium, Neiseeria cinera, Nocardia sp., Sp. or Versinia enterocolitica. The chip is useful for detecting clinically relevant bacteria. The chip is useful for detecting con conce different bacteria. The chip enables determination of one or more different bacterial 165-rRNA in a liquid sample, simultaneously and cenables rapid, accurate, easy and reliable identification of bacteria by genotypic characterization in a provided sample and also enables con in a sample which is produced at reduced cost, enables determination of 165-rRNA in a sample with reduced cost, enables determination of 165-rRNA in a sample with reduced experimental error and variation. The present concerns a province remove remo
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                                                                                                                                                                                                                                                       Analytical chip useful for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample, comprising evanescent field measurement platform as solid carrier and several specific
                                                                                                Utinger D;
                                                                                            Charbonnier Y, Jacquet JG,
                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 243; SEQ ID NO 530; 82pp; English.
                                                                                  Francois P, Char
Abel A, Ehrat M;
                           (UYGE-) UNIV GENEVE HOPITAUX
                                                                                                                                                                                                                                                                                                                                                              recognition elements.
                                                                                                                                                                                            WPI; 2004-375537/35.
                                                                                         Schrenzel J,
Kresbach GM,
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Gaps . 0.8%; Score 14.2; DB 1; Length 19; 44.2%; Pred. No. 8.4e+02; ve. 0; Mismatches 3; Indels 1440 TGCCATGAAACATCCATTC 1458 1 TGTCATGCAACATCCACTC 19 84.2%; 16; Conservative Best Local Similarity Query Match Matches à 임

Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

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RESULT 937 ADO18694

ADO18694 standard; DNA; 19 BP 15-JUL-2004 (first entry) AD018694;

Analytical probe chip of the invention #453.

analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;

Synthetic.

WO2004033720-A2

22-APR-2004.

24-SEP-2003; 2003WO-EP010626.

09-OCT-2002; 2002EP-00022631,

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The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 16S-rRNA, carmole. The chip is useful for detecting one or more bacterial 16S-rRNA, derived from bacteria such as Achromobacter xylosoxidans, Acinetobacter baumannii, Actinomyces israelii, Aerococcus viridans, Bacrecridaes hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacterococcus avium contentum lentum, Escherichia coli, Flavobacterium breve, Eusobacterium nucleatum, Gemella morbillorum, Gardnerella vaginalis, Famenobhius influenzea, Hafnia alvei, Kingella sy, Klebsiella oxytoca catarrhalis, Mycobacterium avium, Neisseria cinerea, Nocardia sp., Cohrobactum anthropi, Basteurella multocida, Peptostreptococcus magnus cohrobactum anthropi, Pasteurella multocida, Peptostreptococcus magnus, Ochrobactum anthropi, Pasteurella sonnei, Veillonella parvula, Veillonella sp. or Yersinia enterocolitica. The chip is useful for detecting cincally relevant bacteria. The chip enables determination of one or more different bacterial 16S-rRNA in a liquid sample, simultaneously and endettypic characterization in a provided sample and also enables con in example with reduced experimental error and variation. The present sequence represents a probe of the invention used as an analytical chip.
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                                                                                                                     Analytical chip useful for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample, comprising evanescent field measurement platform as solid carrier and several specific
                                  Charbonnier Y, Jacquet JG, Utinger D;
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                                                                                                                                                                                                                  Claim 166; SEQ ID NO 453; 82pp; English.
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                                  P, Chark
Ehrat M;
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(UYGE-) UNIV GENEVE HOPITAUX
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                                    Francois
                                                     Abel A,
                                                                                                                                                                                recognition elements.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                       WPI; 2004-375537/35.
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                                  Schrenzel J,
Kresbach GM,
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The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample. The chip is useful for detecting one or more bacterial 16S-rRNA, derived from bacteria such as Achromobacter xylosoxidans, Acinetobacter baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroidasch rowatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium C. Bubacterium lentum, Gemella coli, Flavobacterium breve, Eusobacterium nucleatum, Gemella morbillorum, Gardnerella vaginalis, C. Lactobacillus acidophilus influenzae, Hafnia alvei, Kingella syn, Klebsiella oxytoca catarrhalis, Mycobacterium avium, Neisseria cinera, Nocardia sp., Cohrobactum anthropi, Pasteurella multocida, Peptostreptococcus anguns controbactum anthropi, Pasteurella multocida, Peptostreptococcus anguns controbactum anthropi, Pasteurella multocida, Peptostreptococcus anguns controbactum anthropi, Phigella sonnei, Veillonella parvula, Veillonella sp. or Yersinia enterocolitica. The chip enables determination of one or controbacterization in a liquid ample, simultaneously and contentification of a bacterium even in a loguid ample, simultaneously and contentification of a bacterium even in a complex biological sample. The chip which is produced at reduced cost, enables determination of bacteriu at complex panelum and also enables chip, which is produced experimental error and variation. The present contents a probe of the invention used as an analytical chip.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                Analytical chip useful for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample, comprising evanescent field measurement platform as solid carrier and several specific
              Utinger D;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; 4 synthesis-period; neuroblastoma; stage 4S; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.2; DB 1; Length 19; 34.2%; Pred. No. 8.4e+02; ved. 0; Mismatches 3; Indels
              Charbonnier Y, Jacquet JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                         Claim 228; SEQ ID NO 515; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1441 GCCATGAAACATCCATTCT 1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19
          Francois P, Charrabel A, Ehrat M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HISM ) HISAMITSU PHARM CO LID. (CHIB-) CHIBA PREFECTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADO16007 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-OCT-2002; 2002JP-00316586.
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nes 16; Conservative
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                                                                                                                                                                                   recognition elements.
                                                                              WPI; 2004-375537/35.
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                   Schrenzel J,
Kresbach GM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-OCT-2003;
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1062 CCCAACAAGACATACTCC 1080

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The sequence originates from the chicken alpha-globin gene. It is the complement of primer (227) (AAQ24908). The selected primer is used in practice of the single primer amplification reaction (SPAR). (Updated on 25-MAR-2003 to correct PN field.)
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                                                                                                                                                                                                                                                                                                                           The present invention relates to human nucleic acid sequences (1, AD015739-AD015912) obtained from 4 synthesis-period (stage 4S) of neuroblastoma cell. (1) is useful for prognosing and determining the progress stage of 4 synthesis-period of neuroblastoma. The present sequence is a primer, used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                               Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma cells useful for prognosing and determining progress stage of
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84.2%; Pred. No. 8.4e+02;
rative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.8%; Score 14.2; DB 1; Length 20; Best Local Similarity 84.2%; Pred. No. 8.7e+02; Matches 16; Conservative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 3 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                          Claim 8; SEQ ID NO 269; 455pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Single primer amplification; SPAR; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 ACAGGCAGTCCTCGCTTTC 19
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Matches 16; Conservative
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Nakagawara A, Ohira M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (revised)
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                                                             WPI; 2004-390323/36.
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                                                                                                                                                                                                neuroblastomas.
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19-NOV-1992
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New oligo-nucleotide inhibits cytomegalovirus replication - by binding to a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of CMV diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAT11971-84 are antisense oligonuclectides (ONS) against human cytomegalovirus (CMV) that displayed activities of at least 50 % of control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal mismatches could be tolerated without loss of antiviral activity.

Antisense ONS targeting CMV DNA or RNA coding for the ISI, IE2 or DNA polymerase proteins have been shown to be effective in therapy, polymerase proteins have been shown to increase their efficacy. Modified to reduce nuclease resistance and to increase their efficacy. Modifications include phosphorothicate backbones, alkyl and halogen-substituted sugar modeties at the 2' position. (Updated on 25-MAR-2003 to correct PR
                                                                                                                                                                                                              CMV; human; therapy; prophylaxis; diagnosis; IE1; IE2; DNA polymerase gene; ss.
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                   /note= "phosphorothioate backbone"
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                                                                                                                                                                                  CMV antisense oligonucleotide (ISIS 5476)
                                                                                                                                                                                                                                                                                        cocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 10; Col 17; 66pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Baker B, Draper K, Anderson K;
   1 cccaaccaagaccractrc 19
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                                                                               BP.
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                                                                                                                                                                                                               antisense; cytomegalovirus;
intermediate early complex;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.8%;
Best Local Similarity 84.2%;
                                                                           AAT11973 standard; DNA; 20
                                                                                                                                                       (first entry)
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/*tag=
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                                                                                                                                        (revised)
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                                                                                                                                                                                                                                                                                                    modified base
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                                                                                                                                      25-MAR-2003
13-MAR-1996
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                                                                                                          AAT11973;
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                                                               AAT11973/
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WO9529260-A2
                        WO9504748-A1.
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                                                                         09-AUG-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ84817 and AAQ84818 are a pair of primers for the PCR amplification of AAQ84793, a new autosomal dominant spinocerebellar ataxia type 1 (SCA 1) nucleic acid, which encodes the protein product described in AAR71111. Both the nucleic acid and the protein can be used to develop products, for the presymptomatic detection of a SCA 1 disorder. (Updated on 25-MAR-
                                                                                                                                                                                                                                                                                                                                                           New autosomal dominant spinocerebellar ataxia type 1 nucleic acid - used to develop prods. for detection or presymptomatic diagnosis of a SCA1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
                                                                          Spinocerebellar ataxia type 1 (SCA 1) PCR primer 9-1 (2919-2900)
                                                                                              Spinocerebellar ataxia type 1; SCA 1; presymptomatic diagnosis; PCR primer 9-1 (2919-2900); ss.
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide nucleic acid targetting CMV IE2 nuc sig 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                 Example II; Page 72; 111pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGGATGACCAGCCCTGT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT01674 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%;
                                                                                                                                                                                                                                                                                                            Orr HT, Chung M, Zoghbi HY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40 GCAGGAGGACCAGCAGTGT
                                                                                                                                                                                                                     94WO-US007336.
                                                                                                                                                                                                                                              93US-00084365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-DEC-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antiviral; diagnostic; ss.
                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 84.2
nes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ...20
*tag=
                                                                                                                                                                                                                                                                                    (MINU ) UNIV MINNESOTA.
                                         (revised)
                                                                                                                                                                                                                                                                                                                                   WPI; 1995-061001/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                     WO9501437-A2
                                                                                                                                                                                                                       29-JUN-1994;
                                                                                                                                                                                                                                              29-JUN-1993;
28-JUN-1994;
                                        25-MAR-2003
25-SEP-1995
                                                                                                                                                                                             12-JAN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT01674;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
              AAQ84817;
                                                                                                                                                                                                                                                                                                                                                                                          disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
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New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5 contranslated region, intron/exon (I/E) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or papillomavirus. The PNAs can be used to target RNA and single stranded CC papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which single the resulting double helix or with the first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand binds collinar uptake. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by processes. The present sequence targets CWN IE2 nuclear localisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma.virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Plant pathogen; fungus; Septoria nodorum; Septoria tritici; Fusarium; Pseudocercosporella herpotrichoides; Mycosphaerella fijienais; PCR; Mycosphaerella musicola; amplification; primer; ribosomal RNA gene; internal transcribed region; strain; capture; colourimetric assay; isolate; development; population; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.8S ribosomal RNA gene ITS primer ITS2.
to a polyamide backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Crooke ST, Mirabelli CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 131 GGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 2; Page 44; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
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                                                                                                                                                                                                                                                                                                                                                                                                PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1995-090841/12.
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A novel method for the detection of plant pathogenic strains of fungi
e.g. Septoria nodorum, S.tritici, Pseudocercosporella herpotrichoides,
Wycosphaerella fijiensis, M.musicola or Fusarium spp, involves the PCR
amplification of sequences found in the internal transcribed region (ITS)
of the 185, 5.85 and 285 ribosomal RNA genes by the primers AA094359-93
and AAT05357-72. These primers are derived from the ITS sequences of
these fungi (AAT05394-105404 and AA094398) and are strain specific. The
amplification products of the reactions using these primers can be used
with the capture primers AAT05378-93 in colourimetric assays. The primers
and ITS DNAs can be used for the detection of specific fungal pathogen
                                                                                                                                                                                                                                                                                                                                                             encoding intervening transcribed sequence - used for detection of nt fungal pathogens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plant pathogen; fungus; Septoria nodorum; Septoria tritici; Fusarium; Pseudocercosporella herpotrichoides; Mycosphaerella fijiensis; PCR; Mycosphaerella musicola; amplification; primer; ribosomal RNA gene; internal transcribed region; strain; capture; colourimetric assay; isolate; development; population; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            isolates and in monitoring disease development in plant populations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.8S ribosomal RNA gene ITS primer ITS3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 5; Page 15; 65pp; English
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                                 95WO-US004712.
                                                                                               94US-00233608.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                            (CIBA ) CIBA GEIGY AG
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                                                                                                                                                                                                                                                                                             WPI; 1995-383005/49.
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                                                                                                                                                                                                                                Ligon JM, Beck JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Beck JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
les 16; Conser
                                 19-APR-1995;
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                                                                                               25-APR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
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XX
AC AAQ943
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AC AAQ943
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DY 04-JUN
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EN Plant
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EN Plant
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EN MYCOSE
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EN WO952;
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                                        A novel method for the detection of plant pathogenic strains of fungiengs. Septoria nodorum, S.tritici, Pseudocercosporella herpotrichoides, Mycosphaerella fijiensis, M.musicola or Fusarium spp, involves the PCR amplification of sequences found in the internal transcribed region (ITS) of the 185, 5.85 and 285 ribosomal RNA genes by the primers AAQ94359-93 and AAT05357-72. These primers are derived from the ITS sequences of these fungi (AAT05394-T05404 and AAQ94398) and are strain specific. The amplification products of the reactions using these primers can be used with the capture primers AAT05378-93 in colourimetric assays. The primers and ITS DNAs can be used for the detection of specific fungal pathogen isolates and in monitoring disease development in plant populations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Internally transcribed spacer 3; ITS3; systemic candidiasis; detection; diagnosis; universal primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ91602 is an universal primer for the Candida spp. internally transcribed spacer 2 (ITS2). The ITS can be used for the detection of Candida spp., partic. for the diagnosis of systemic candidiasis
                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated Candida nucleic acid sequences - used for detection of Candida species, partic. for diagnosing systemic candidiasis.
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44.2%; Pred. No. 8.7e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      internally transcribed spacer 3 (ITS3) primer.
                                                                                                                                                                                                                                                                                 0.8%; Score 14.2; DB 1; Length 2
84.2%; Pred. No. 8.7e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                  Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Morrison CJ,
                                                                                                                                                                                                                                                                                                                                                   1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lott TJ,
            Claim 5; Page 15; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Col 6; 10pp; English.
                                                                                                                                                                                                                                                                                                                                                                                    19 CIGCGIICTICAICGAIGC 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1995-230900/30.
                                                                                                                                                                                                                                                                                           Local Similarity
es 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Candida spp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-FEB-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ91602;
                                                                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 946
                                                                                                                                                                                                                                                                                                                  Matches
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The sequences given in AAT03664-73 are oligonucleotides which are used in the diagnosis of hepatitis C virus (HCV). These oligonucleotides acts as primers to amplify region of the HCV genome, pref. hypervariable regions. The amplified product is subjected hot electrophoresis under denaturing conditions. Preferably, primer MS1, MS2, MS3, MS4, MS5 or MS6 and an oligo selected from MR1, MR2 or MR1' are used as primer pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          L-proline-4-hydroxylase; convert; catalyse; L-proline; production; trans-4-hydroxy-L-proline; 2-ketoglutaric acid; ferrous ion; industrial scale; intermediate; manufacture; drug; food additive; primer; PCR; polymerase chain reaction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA coding for L-proline-4-hydroxylase of microbial origin - for large scale production of trans-4-hydroxy-L-proline, useful as an intermediate in drug synthesis or as a food additive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT47929-30 are primers used to amplify the sequence encoding the N-terminal of L-proline-4-hydroxylase (WO9291) from Dactylosporangium sp. The enzyme converts L-proline to trans-4-hydroxy-L-proline in the presence of 2-ketoglutaric acid and ferrous ions. The DNA (AAT47924) is used for the efficient production of trans-4-hydroxy-L-proline on an industrial scale for use as an intermediate in the manufacture of drugs and as a food additive
                                                                                   Oligo:nucleotide primers for amplifying hepatitis C virus cDNA - specifically the hyper:variable regions, useful for diagnosis of hepatitis C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Primer for N-terminal L-proline-4-hydroxylase coding sequence.
                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                            3; Indels
                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 2 A; 6 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                     Score 14.2; DB 1;
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                               916 CIGITCCIGITCCAGCIGC 934
                                                                                                                                                                Claim 4; Page 2; 27pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGTTGATGTGCCAGCTGC 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shibasaki
                                                                                                                                                                                                                                                                                                                                                                       0.8%;
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                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 84.2'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT47929 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1996-425429/42.
                                                WPI; 1996-064846/07
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               (SRLS-) SRL KK.
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                                                                                                                              hepatitis
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                                                                                                                                                                                                                      Internally transcribed spacer 2, ITS2; systemic candidiasis; detection; diagnosis; universal primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA091604 is an universal primer for the Candida spp. internally transcribed spacer 4 (ITS4). The ITS can be used for the detection of Candida spp., partic. for the diagnosis of systemic candidasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    detection of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated Candida nucleic acid sequences - used for detect
Candida species, partic. for diagnosing systemic candidiasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.8%; Score 14.2; DB 1; Length 20; Best Local Similarity 84.2%; Pred. No. 8.7e+02; Matches 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                       Candida spp. internally transcribed spacer 2 (ITS2) primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Reiss E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seguence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Morrison CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hepatitis C diagnostic oligonucleotide MR2.
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                                                                          AAQ91604 standard; DNA; 20 BP.
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Gaps

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20-JUN-1995

Zakroff S,

Synthetic.

AAT03667;

RESULT 948

AAT03667

1549

à g

diagnosis;

AAQ91604;

RESULT 947

AAQ91604

Synthetic

PCR; polymerase chain reaction; paternity; maternity; humn; pedigree; linkage analysis; genetic disease; animal; plant; breeding; locus;

hybridisation; chromosome; ds

Polymorphism;

repeat sequence; genetic marker; primer; amplification;

Primer #2 to amplify repeat sequence marker Mfd106.

(first entry)

(revised)

25-MAR-2003 18-JUN-1997

BP.

AAT66009 standard; DNA; 20

AAT66009/c

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             analogues which act as inhibitors of gene expression (as sense/antisense, ribozyme or triplex-forming molecules), useful as diagnostic agents (i.e. probes for detecting nucleic acid) or for treatment of diseases caused by viruses, influenced by integrins or cell-cell adhesion receptors, induced by factors such as TNF-alpha, or cancer or restenosis. The products of the invention satisfy the requirements of good in-vivo stability; ability to cross cellular and nuclear membranes, and specific binding to target nucleic acid better than known oligonucleotides. (Updated on 27-AUG-2003)
                                                                                                                                                                                                                                                                                                                                                        Phosphonomonoester analogue; inhibitor; antisense; cancer; restenosis; ribozyme; diagnostic agent; detection; treatment; disease; virus; integrin; cell-cell adhesion receptor; TNF-alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New oligo:nucleotide analogues contg. phospho:mono:ester bridges - for therapeutic inhibition of gene expression, e.g. in cancer or viral infection, with good specificity and in vivo stability.
                                                                                Gaps
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                                              Score 14.2; DB 1; Length 20; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                           HSV-directed phosphonomonoester oligonucleotide analogue 5.
                                                                             3; Indels
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                BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
                                                                             0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 18; 36pp; German.
                                                                                                          856 AAGGACCTGAAGCAGTACC 874
                                                                                                                                1 ACGGAGCTCAAGCAGTACC 19
                                                                                                                                                                                                                      ВЪ.
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                                             0.8%;
                                                           84.2%;
                                                                                                                                                                                                                  AAX24129 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                (first entry)
                                                             Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                 (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                       Human herpesvirus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1996-425893/43.
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                Sequence 20
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01-JUL-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                 AAX24129;
                                              Query Match
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Detection of polymorphic genetic markers of the form (dC-dA)n(dG-dT)n using novel nucleic acid mols. as primers.

91US-00754351.

(MARS-) MARSHFIELD CLINIC.

WPI; 1997-042299/04

Weber JL;

94US-00222177. 89US-00341562.

04-APR-1994; 21-APR-1989; 05-SEP-1991;

US5582979-A. 10-DEC-1996.

Synthetic.

Claim 7; Col 13-14; 186pp; English.

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The invention relates to the isolation of polymorphic repeat sequences having the sequence (dC-dA)n.(dG-dT)n which can be used as genetic markers. Primers based on these sequences can be used to detect these repeats, especially for use in e.g paternity or maternity testing, human genetic analysis such as linkage analysis of genetic disease, commercial animal or plant breeding or pedigree analysis. Clones containing the repeat sequences were isolated by hybridisation of chromosome-specific phage libraries with a synthetic poly(dC-dA).(dG-dT) probe. Over 100 repeat blocks were isolated. The primers AAT65798-T66047 were used to PCR amplify the inserts from the isolated clones containing the repeat sequences. The primers AAT66009-9 wate used to amplify the respeat sequence. The primers AAT66009-9 wate used to amplify the respeat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Primer ITS2 for Candida internal transcribed spacer 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           correct PF field.)
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04-NOV-1997
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Gaps

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0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels

0;

Conservative

Local Similarity les 16; Conser

Best Loca Matches

Query Match

553 CCCTCAGCCGCCCTCC 571

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CCCCTCAGCAGCCTCCCCC 1

19

RESULT 951

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Gaps

10017621-3sl.rng

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Isolated nucleic acid specific for internal transcribed spacer of Candida krusei - can be detected by specific probe for rapid and sensitive diagnosis of systemic candidiasis.
                                    The present sequence is a primer for the PCR amplification of the Candida internal transcribed spacer 4 (ITS4), which can be used in the diagnosis systemic candidiasis. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence is an universal Candida internal transcribed spacer (ITS) primer for the detection of ITS, useful to diagnose systemic Candida infection, i.e. candidiasis. (Updated on 25-MAR-2003 to correct
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                                                                                                                                   Match 0.8%; Score 14.2; DB 1; Length 20; Local Similarity 84.2%; Pred. No. 8.7e+02; les 16; Conservative 0; Mismatches 3; Indels
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84.2%; Pred. No. 8.7e+02;
.ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        Candida universal internal transcribed spacer primer, ITS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Morrison CJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                    Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (USSH ) US DEPT HEALTH & HUMAN SERVICES
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             Example 1; Col 13-14; 10pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polymerase chain reaction; ss.
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(first entry)
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Best Local Similarity 84.2'
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-APR-1995;
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24-SEP-1997
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                                                                                                                                                                                                                                                                                                                                                AAT75521;
                                                                                                                                         Query Match
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AAT75523
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                                                                                                                                                                                                                                                                                                                                                                                            The present sequence is a primer for the PCR amplification of the Candida internal transcribed spacer 2 (ITS2), which can be used in the diagnosis systemic candidiasis. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Primer; internal transcribed spacer 4; ITS4; diagnosis; PCR; amplification; polymerase chain reaction; systemic candidiasis; ss
Primer, internal transcribed spacer 2, ITS2; diagnosis; PCR; amplification; polymerase chain reaction; systemic candidiasis; ss.
                                                                                                                                                                                                                                                                                                  Candida tropicalis internal transcribed spacer 2 - and probes that hybridise to it, useful for highly sensitive diagnosis of systemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.8%; Score 14.2; DB 1; Length 20; Best Local Similarity 84.2%; Pred. No. 8.7e+02; Matches 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Morrison CJ;
                                                                                                                                                                                                                                       Morrison CJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Primer ITS4 for Candida internal transcribed spacer 4.
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                                                                                                                                                                                                                                                                                                                                                                  Example 1; Col 13-14; 10pp; English
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                                                                                                                                                                            93US-00065845
                                                                                                                                              95US-00429522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT84762 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lasker B, Reiss E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1997-362923/33
                                                                                                                                                                                                                                          Lasker B, Reiss E,
                                                                                                                                                                                                                                                                      WPI; 1997-362923/33
                                                                                                                                                                                                                                                                                                                                   candidiasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-MAY-1993;
                                                                                                                                             26-APR-1995;
                                                                                                                                                                            20-MAY-1993;
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04-NOV-1997
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                                                                                  US5645992-A
                                                                                                                 08-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                  Synthetic.
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à a ..

Gaps

10017621-381.rng

Page 471

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AAT68369-T68381 and AAT70842 are a set of primers used in a method for assessing the integrity of a Y chromosome. The primers are capable of priming the chromosome loci: SMCY, DYS217, DYS220, DYS217, DYS237, DYS215, MIC2 and DAZ(6) and MIC2. The method can be used to rapidly and reproducibly assess the integrity of specific regions of the Y chromosome that are associated with male fertility. It can be used to assess the integrity of the Y chromosome in males exhibiting azosoparia or oligospermia (no or very little spermatozoa in the semen) or to assess the genotype of infants of phenotypically ambiguous sexuality. The method can also be used in diagnosis and quality control
                                                                                                                                                                                                                                                                                                                                                                                                                                    Assessing integrity of Y chromosome - by amplification of selected human chromosome loci by multiplex PCR and comparison with normal control DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       genetic disease; genetic trait; dog; carrier of recessive disease; copper toxicosis; CT; canine genome map; breed-specific profile; DNA fingerprint; dog identification; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.2; DB 1; Length 20;
44.2%; Pred. No. 8.7e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Canine disease marker-related PCR primer 917.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Yuzbasiyan-Gurkan V;
                                                                                                                                                                                                                                                                                                                       Ä
                                                                                                                                                                                                                                                                                                                       Muallem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1483 CACAAACTTCCTGACACTA 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 2; Page 73; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  073/c
ADG78073 standard; DNA; 20 BP.
                                                                                                                  96WO-US009421.
                                                                                                                                                                      95US-00472416.
95US-00531556.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84.2%;
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(UNMS ) UNIV MICHIGAN STATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16; Conservative
                                                                                                                                                                                                                                                                                                                    Agoulnik AI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brewer GJ, Venta PJ,
                                                                                                                                                                                                                                                              (PROM-) PROMEGA CORP
                                                                                                                                                                                                                                                                                                                                                                             WPI; 1997-099942/09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
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   WO9641007-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-FEB-1996;
                                                                                                                  06-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-MAR-2004
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                                                                                                                                                                                                       18-SEP-1995;
                                                                                                                                                                         07-JUN-1995;
                                                         19-DEC-1996
                                                                                                                                                                                                                                                                                                                    First MK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADG78073;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 957
ADG78073/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
      g
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Isolated nucleic acid specific for internal transcribed spacer of Candida krusei - can be detected by specific probe for rapid and sensitive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polymerase chain reaction; fertility; azoospermia, oligospermia; infertile; diagnosis; DYS209; DYF43S1; DYS210; DYS211; DYS33; DYS1; SMCX; DAZ(1); DYS218; DYS219; DYS219; DYS219; DYS241; DYS219; DYS241; DYS241; DYS241; DYS219; DYS199; SRY; DYS197; DYS240; DYS271; DYS221; KAL182; DAZ(2); DYS224; DYS224; DYS225; DYS220; DYS221; DYS321; KAL182; DAZ(2); DYS224; DYS226; DYS2217; DYS220; DYS217; DYS21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is an universal Candida internal transcribed spacer (ITS) primer for the detection of ITS, useful to diagnose systemic Candida infection, i.e. candidiasis. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Y chromosome; integrity; chromosome locus; primer; amplification; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Loci-specific primer for assessing integrity of human Y chromosome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·.
                                                                                                                                                                                                                                                          Internal transcribed spacer; ITS; detection; probe; diagnosis; systemic infection; candidiasis; primer; PCR; amplification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                 Candida universal internal transcribed spacer primer, ITS4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Morrison CJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lott IJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 2; Col 13-14; 10pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnosis of systemic candidiasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       crecerretrearcearec 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lasker B, Reiss E, Zakroff S,
                                                                                                                                                                                                                                                                                                                       polymerase chain reaction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%;
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AAT75523 standard; DNA; 20
                                                                                                                                              (first entry)
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                                                                                                                  (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-309822/28
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Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-APR-1995;
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                                                                                                            25-MAR-2003
24-SEP-1997
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                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                         AAT75523
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                                                                                                     This invention relates to novel oligonucleotide PCR primers which may be used to identify markers associated with genetic diseases and traits in obegs, in particular to disgnose genetic diseases that are not phenotypically visible and to identify carriers of recessive diseases. A specific application is diagnosis of copper toxicosis (CT). The invention can also be used to create a genetic map of the canine genome; to generate breed-specific profiles; to establish paternity and to identify dogs from DNA fingerprints. The method provides rapid analysis of the target sequences from only a small sample of DNA. Diagnosis can be done at any time in the dog's life. The present sequence is that of a PCR
New oligonucleotide primers for diagnosis of genetic diseases and traits in dogs - amplify specific regions of the genome containing microsatellite repeats, especially for diagnosing copper toxicosis and
                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               genetic disease; genetic trait; dog; carrier of recessive disease; copper toxicosis; CT; canine genome map; breed-specific profile; DNA fingerprint; dog identification; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                   Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                          Sequence 20 BP; 1 A; 8 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Canine disease marker-related PCR primer 474.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Yuzbasiyan-Gurkan V;
                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                            Claim 1; Page 19; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                               CAGAGGCAGAAGCAGGCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                 663 CAAAGGCAAAAGCAAGCTC
                                                                                                                                                                                                                                                                                                                        0.8%;
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(UNMS ) UNIV MICHIGAN STATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                             primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Venta PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9731011-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-FEB-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Brewer GJ,
                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADG77630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADG77630;
                                               carriers
                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADG77630
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This invention relates to novel oligonucleotide PCR primers which may be used to identify markers associated with genetic diseases and traits in dogs, in particular to diagnose genetic diseases that are not phenotypically visible and to identify carriers of recessive diseases. A specific application is diagnosis of copper toxicosis (CT). The invention

Claim 1; Page 15; 40pp; English.

carriers

New oligonucleotide primers for diagnosis of genetic diseases and traits in dogs - amplify specific regions of the genome containing microsatellite repeats, especially for diagnosing copper toxicosis and

WPI; 1997-435082/40.

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can also be used to create a genetic map of the canine genome; to generate breed-specific profiles; to establish paternity and to identify dogs from DNA fingerprints. The method provides rapid analysis of the target sequences from only a small sample of DNA. Diagnosis can be done at any time in the dog's life. The present sequence is that of a PCR primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Internal transcribed spacer; ITS; ribosomal RNA; Fusarium avenaceum; Fusarium culmorum; Pusarium graminearum; Fusarium moniliforme; plant; Septoria avenae; Microdochicum nivale; Fusarium poae; fungal pathogen; PCR; nucleic acid detection; PCR primer; ss.
                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA isolated from fungal RNA, and its internal transcribed spacer sequence - used for detecting fungal pathogens in plant tissue.
                                                                                                                                                                                                                0;
                                                                                                                                                                           Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                        Sequence 20 BP; 0 A; 9 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ribosomal gene 5.85 rDNA specific primer ITS3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 6; Col 17; 56pp; English.
                                                                                                                                                                                                                                                      826 TCCCTCACCCTTGTTG 844
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                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (NOVS ) NOVARTIS FINANCE CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95WO-US004712.
96US-00722187.
                                                                                                                                                                             0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                    AAV62540 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-541745/46.
                                                                                                                                                                                              Local Similarity
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15-OCT-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fusarium sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US5814453-A
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                                                                                                                                                                                                                    16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                       AAV62540;
                                                                                                                                                                               Query Match
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                                                                                                                                                                                                                                                                                                                                               RESULT 959
                                                                                                                                                                                                                    Matches
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AAV59027;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beck JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 962
                           AAV59027/
ID AAV5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            various fungal isolates used for fungal detection in the course of the invention. The primers are designed based on the internal transcribed spacer (ITS) sequences of the various fungal species. The invention provides a DNA molecule isolated from the ribosomal RNA gene region of a fungal pathogen, where the DNA molecule consists of an ITS sequence selected from ITS1 and ITS2 of Fusarium culmorum, Fusarium graminearum, Fusarium moniliforme, Septoria avenae or Microdochicum nivale. A method for detecting F. graminearum, F. culmorum, F. moniliforme, F. poae, F. avenaeceum and M. nivale isolates is also provided which comprises insolating DNA from a plant leaf infected with at least one of the above pathogens and amplifying parts of the ITS sequence of the pathogen(s) by PCR using specific primers from within these sequences. The pathogen(s) are detected by visualising the amplified part of the ITS sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Internal transcribed spacer; ITS; ribosomal RNA; Fusarium avenaceum; Pusarium culmovum; Fusarium graminearum; Fusarium moniliforme; plant; Septoria avenae; Microdochicum nivale; Fusarium poae; fungal pathogen; PCR; nucleic acid detection; PCR primer; ss.
                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA isolated from fungal RNA, and its internal transcribed spacer sequence - used for detecting fungal pathogens in plant tissue.
                                                    0;
  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
Score 14.2; DB 1; Length 2 Pred. No. 8.7e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.2; DB 1;
Pred. No. 8.7e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                            Ribosomal gene 5.85 rDNA specific primer ITS2.
                                                                                              1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 6; Col 17; 56pp; English.
                                                                                                                          CTGCGTTCTTCATCGATGC 1
                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (NOVS ) NOVARTIS FINANCE CORP.
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  0.8%;
                        84.2%;
                                                                                                                                                                                                                                                                AAV62539 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                            17-DEC-1998 (first entry)
                                                 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-541745/46.
                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-JUL-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US5814453-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                  AAV62539;
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Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Beck JJ;
                           Best Local
                                          Matches
                                                                                                                                                                                                                 RESULT 96
AAV62539
AAV7
AAVA62539
AAVA62
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                                                                                                                                                                                                                                       Internal transcribed spacer; ITS; Microdochium; Fusarium; wheat pathogen; fungal pathogen identification; infection identification; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Internal transcribed spacer, ITS, Microdochium; Fusarium; wheat pathogen, fungal pathogen identification; infection identification; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wheat pathogen internal transcribed spacer sequences - used as a basis for primers for the species-specific polymerase chain reaction detection of the pathogens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Internal transcribed spacer primer ITS28.
                                                                                                                                                                                   Internal transcribed spacer primer ITS3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1549 CTTCGGTCTTCGTCGATGC 1567
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 CTGCGTTCTTCATCGATGC 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-00905314.
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AAV59027 standard; DNA; 20
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                                                                                                       (revised)
(first entry)
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(first entry)
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Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-593995/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-AUG-1997;
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                                                                                                                                                                                                                                                                                                                Synthetic.
Fusarium sp.
                                                                                                    25-MAR-2003
06-JAN-1999
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06-JAN-1999
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Gaps

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3; Indels

1549 CTTCGGTCTTCGTCGATGC 1567

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Local Similarity

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crecerrerrearearee 20

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PCR primers AAV43271-76 were used to isolate internal transcribed spacer (ITS) regions from Helminthosporium turcicum isolates 6586, 26306 and 6402, H. maydis isolates 6921, 11554 and 24772, H. carbonum isolates 5870 and 16185, Kabbtiella zeae isolates 5631, 18594 and 5125 and Cercospora zeae-maydis isolates 5860, POPS 12 and Ladder 3-1. The specification describes a method for the detection of a maize fungal pathogen. The method comprises isolating DNA from a plant leaf infected with a pathogen, subjecting the DNA to PCR amplification using at least one primer derived from the ITS sequence (see AAV43277-303)
                                                                                                                                     PCR primers AAV43271-76 were used to isolate internal transcribed spacer (ITS) regions from Helminthosporium turcicum isolates 6586, 26306 and 6402, H. maydis isolates 6921, 11534 and 24772, H. carbonum isolates 5870 and 16185, Kabatiella zeae isolates 5631, 1854 and 5125 and Cercospora zeae-maydis isolates 5860, POPS 12 and Ladder 3-1. The specification describes a method for the detection of a maize fungal pathogen. The method comprises isolating DNA from a plant leaf infected with a pathogen, subjecting the DNA from a plant leaf infected with a primer derived from the ITS sequence (see AAV43277-303)
               New internal transcribed spacer sequences of maize fungal pathogens and primers and primer pairs – used to detect pathogens e.g. Helminthosporium carbonum, Cercospora zeae-maydis and Kabatiella zeae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New internal transcribed spacer sequences of maize fungal pathogens and primers and primer pairs - used to detect pathogens e.g. Helminthosporium carbonum, Cercospora zeae-maydis and Kabatiella zeae.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Internal transcribed spacer; ITS; detection; maize; fungal pathogen;
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                                                                                                                                                                                                                                                                                                                                                                                            Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer ITS2 used to isolate ITS regions.
                                                                                                    Example 2; Page 11; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1549 CTTCGGTCTTCGTCGATGC 1567
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97EP-00810779.
                                                                                                                                                                                                                                                                                                                                                                                                 0.8%;
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Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 964
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                                                                                                                                                                                                                                                                                                                                                           yen internal transcribed spacer sequences - used as a basis for the species-specific polymerase chain reaction detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Internal transcribed spacer; ITS; detection; maize; fungal pathogen;
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0
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Pred, No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer ITS3 used to isolate ITS regions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Col 8; 20pp; English.
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Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                           Wheat pathogen internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NOVS ) NOVARTIS AG
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                                                                                                                                                                                                                                                                                                                  WPI; 1998-593995/50
                                                                                                                                                                                                                                                                                                                                                                                                   the pathogens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-NOV-1997;
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                          Fusarium sp
                                                               US5827695-A
                                                                                                         27-0CT-1998
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    Synthetic.
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                                                                                                                                                                                                                                                                             Beck JJ;
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10017621-3sl.rng

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Lipid metabolic pathway; h-LMP-1 gene; cardiovascular disease; atherosclerosis; biliary tract disorder; gall stone; therapy; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This PCR primer anneals to bases 371-390 of a human lipid metabolic pathway h-LMP-1 cDNA clone (see AAV11548) isolated from human breast cDNA. It can be used in PCR reactions to clone LMP homologues in other cell types, e.g. from other tissues and from other mammalian organisms. LMP nucleic acids and polypeptides (see AAM58888) are useful for developing methods for treatment of cardiovascular diseases or for modulating lipid uptake or metabolism, and in drug screening assays
                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA encoding lipid metabolic pathway polypeptide(s) - useful for treatment of cardiovascular disease or modulation of lipid uptake or
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                                                                       Length 20;
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84.2%; Pred. No. 8.7e+02;
rative 0; Mismatches 3; Indels
                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human lipid metabolic pathway h-LMP-1 gene PCR primer.
Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                             0.8%; Score 14.2; DB 1;
84.2%; Pred. No. 8.7e+02;
ative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 9 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 85; 102pp; English.
                                                                                                                                                                                              1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                864 GAAGCAGTACCTGGATGAC 882
                                                                                                                                                                                                                                   2 CTGCGTTCTTCATCGATGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 GAAGAAGAACCAGGATGAC 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96US-00707399
                                                                                                                                                                                                                                                                                                                                                                                                                          AAV11551 standard; cDNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-SEP-1998 (first entry)
                                                                                                                                16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human; PCR; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1998-193545/17.
                                                         Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-AUG-1997;
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Best Local Simi
Matches 16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV11551;
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ID AAV425
XX
AC AAV425
XX
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1D AAV,
AC AAV,
XX AC AAV,
XXX Lip,
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XXX Homm,
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                                                          Assay; Y chromosome; Y chromosome loci, human, male fertility, detection, deletion mutation, male infertility; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                              Assessing Y chromosome integrity in predicting human male infertility by amplifying specific regions of human Y chromosome linked to normal fertility by multiplex PCR and detecting deletion mutations.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Phytophthora; potato; late-blight; P. infestans; P. erythroseptica; P. nicotianae; pink rot; detection; disease; PCR primer; ss.
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR primer specific for Phytophthora infestans sequences.
                             PCR primer 2 used to amplify human loci DYS7 DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1483 CACAAACTTCCTGACACTA 1501
                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 2; Page 35; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19 CAAAACTICCIGAGACCA 1
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02-OCT-1998 (first entry)
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Phytophthora infestans.
                                                                                                                                                                                                                                                                                                      Muallem A;
                                                                                                                                                                                                                                                                        (PROM-) PROMEGA CORP.
                                                                                                                                                                                                                                                                                                                                   WPI; 1998-333352/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                          04-DEC-1996;
                                                                                                       Synthetic.
Homo sapiens.
                                                                                                                                                                                                             04-DEC-1997;
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AAV22643/c
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This sequence represents a PCR primer for the DNA encoding the Fanconi
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                                                                                                                                                                                                                        Local Similarity 84.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV70045 standard; DNA;
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modified_base
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Rattus sp.
                                                                                                                    diagnosis
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                                                                                                                                                                                                                                  Best Loca
Matches
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                                                                                                                                                                                                                                                                                                                                      pCR primers AAV22642-46 are specific for Phytophthora species which infect potatoes and cause diseases such as late-blight. PCR primers AAV2264-43 amplify a 456 bp fragment from P. infestens. PCR primers AAV22644-45 amplify a 136 bp fragment from P. erythroseptica, and PCR primers AAV22643 and AAV22646 amplify a 455 bp fragment from P. incotianae. The primer sets are useful for detecting Phytophthora species by PCR. Phytophthora species infecting potatoes may result in late blight (caused by P. infestens) or in pink rot (caused by P. erythroseptica and P. bricotianae), and the primers can detect these diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fanconi anaemia of complementation group A; FA-A; genetic defect; prenatal FA-A; FA-A carrier detection; disease diagnosis; PCR primer; ss.
                                                                                                                                                                                                               ဌ
                                                                                                                                                                                                        Oligomuclectide primers for PCR detection of Phytophthora spp. - e.g. detect P. infestans, which causes potato light blight and distinguish from P. erythroseptica and P. nicotianae, which cause pink rot.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA for Fanconi Anaemia complementation group A - useful for, e.g. developing products for diagnosis and screening of disease and gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.2; DB 1; Length 20;
44.2%; Pred. No. 8.7e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Primer for Fanconi anaemia of complementation group A gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                      Hatziloukas E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FANC-) FANCONI ANEMIA RES FUND INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                         Carras M,
                                                                                                                                                                                                                                                                                                     Claim 2; Page 27; 40pp; English.
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                              96US-00704207
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Best Local Similarity 84.2%;
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      differentiate between them
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                                                                          (USDA ) US SEC OF AGRIC
                                                                                                                         Bunyard B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-240012/21.
                                                                                                                                                                   WPI; 1998-179378/16.
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Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-OCT-1996;
                                  28-AUG-1996;
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                                                                                                                      Tooley
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specifically hybridisable with a region of a nucleic acid encoding rat comportant. The present invention also describes antisense of the corporation of the corporation. The present invention also describes antisense oligonucleotides which regulate the co-un protein. The antisense oligonucleotides are used for the diagnosis and treatment of diseases or disorders associated with Activating Protein 1 expression, of which corporates associated with the antisense oligonucleotides are used in compositions as corporated with a carrier and a chemotherapeutic agent. They are used to regulate the expression of co-pos or co-un in calls or tissues, preferably by inhibiting metastasis. They also regulate cell cycle expression and can be used to treat an animal with, or being prone to, a
                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antisense oligomucleotides regulating Activating Protein 1 subunits - hybridise with c-fos and c-jun mRNA, used for regulating metastasis, cell cycle expression and hyperproliferative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rat; c-fos; c-jun; activating protein 1; AP-1; diagnosis; metastasis; antisense oligonucleotide; phosphorothioate; regulation; malignant tumour; cell cycle expression; hyperproliferative disease; ss.
anaemia of complementation group A (FA-A) protein of the invention. The amplified DNA's may be used to complement a genetic defect in a cell (especially the FA-A gene). The products can be used for screening (especially prenatal FA-A), detection of FA-A carriers and FA-A disease
                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV70042 to AAV70052 represent antisense oligonucleotides which
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                                                                                                                                                                 Length 20;
                                                                                                                                                                                                      3; Indels
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"phosphorothioate linkages"
                                                                                                                          Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                               0.8%; Score 14.2; DB 1;
84.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rat c-Fos protein antisense oligonucleotide #99.
                                                                                                                                                                                                        0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 9; Page 57; 120pp; English
                                                                                                                                                                                                                                               259 GAGGCCCCCACACGTGCTG 277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dean NM, Mckay R, Miraglia L,
                                                                                                                                                                                                                                                                      19 GAGTGCCCCACATGTGCTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hyperproliferative disease
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à a

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This sequence represents a primer for Candida nucleic acid sequences. T amplified sequences are recognised by the probes of the invention. The probes can be used in the method of the invention for the detection of Aspergillus sp. and Candida sp. in a sample. The probes can be used to diagnose systemic candidiasis. (Updated on 27-AUG-2003 to correct OS field.)
                                 PCR primer; Candida detection; Aspergillus; systemic candidiasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                                 - useful for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                      tch 0.8%; Score 14.2; DB 1; Length 20; al Similarity 84.2%; Pred. No. 8.7e+02; 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Morrison CJ;
                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
        Primer ITS2 for Candida nucleic acid sequences
                                                                                                                                                                                                                   Shin JH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Candida albicans ITS2 rDNA PCR primer ITS3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lott TJ,
                                                                                                                                                                                          (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                  Probes for detection of Candida species
                                                                                                                                                                                                                   В,
                                                                                                                                                                                                                                                                                                     Example 2; Page 47; 55pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1549 CITCGGICTTCGTCGATGC 1567
                                                                                                                                                                                                                  Holloway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 CTGCGTTCTTCATCGATGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zakroff S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                            97WO-US016423
                                                                                                                                                                   96US-0026387P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95US-00429520.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93US-00065845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT89974 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                  Reiss E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (USGO ) US GOVERNMENT
                                                                                                                                                                                                                                                                               systemic candidiasis.
                                                                                                                                                                                                                                          WPI; 1998-216957/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Reiss E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1998-007977/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Candida albicans.
                                                                                                                                          15-SEP-1997;
                                                                                                                                                                  16-SEP-1996;
                                                                                            WO9811257-A1
                                                                                                                                                                                                                  Morrison CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-MAR-1998
                                                                                                                   19-MAR-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-NOV-1997.
                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lasker B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT89974;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                     Candida.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT89974/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents a primer for Candida nucleic acid sequences. The amplified sequences are recognised by the probes of the invention. The probes can be used in the method of the invention for the detection of Aspergillus sp. and Candida sp. in a sample. The probes can be used to diagnose systemic candidiasis. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                           PCR primer; Candida detection; Aspergillus; systemic candidiasis; ss.
                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Probes for detection of Candida species - useful for diagnosis of
                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; iive 0; Mismatches 3; Indels
                                                      3; Indels
       Sequence 20 BP; 2 A; 2 C; 11 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                             Score 14.2; DB 1;
Pred. No. 8.7e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                  Primer ITS3 for Candida nucleic acid sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shin JH;
                                                                                                                                                                                                                                                                                                                                                                                                                                    (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Holloway B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 16; 55pp; English.
                                                                             1720 AGCCATGTTCACCTGCCCA 1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                            19 AGCCATCTCCACCAGCCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCGTTCTTCATCGATGC 1
                                                                                                                                                               AAV24006 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV24009 standard; DNA; 20 BP
                             0.8%;
                                                                                                                                                                                                                                                                                                                                                                                      97WO-US016423
                                                                                                                                                                                                                                                                                                                                                                                                              96US-0026387P
                                                                                                                                                                                                                              (first entry)
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                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Reiss E,
                                                                                                                                                                                                                 (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          systemic candidiasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1998-216957/19.
                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Morrison CJ,
                                                                                                                                                                                                                                                                                                                                                                                      15-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                             16-SEP-1996;
                                                                                                                                                                                                                                                                                                                                      WO9811257-A1
                                                      16;
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06-AUG-1998
                                                                                                                                                                                                              27-AUG-2003
06-AUG-1998
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                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                        AAV24006;
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                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                Candida.
                                                                                                                                       RESULT 971
                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV24009
ID AAV2
XX
AC AAV2
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DT 27-A
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Gaps

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of

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PCR primers AAT89973-T89976 and AAT89982 are used to amplify the ITS2 region of Candida albicans. This amplified region is used in a novel method for diagnosing systemic candidiasis and comprises hybridising DNA released from lysed Candida cells in a blood sample with a probe specific for the ITS2 region. Probes derived from this region can be used for krusei, C. parapsilosis or C. albicans in immunocomparis, C. glabrata, C. candida cell per microlitre of blood can be detected
                                                                                               PCR primers AAT89973-T89976 and AAT89982 are used to amplify the ITS2 region of Candida albicans. Primer AAT89974 is approximately 25bp from the end of the 5.8S subunit. This amplified region is used in a novel method for diagnosing systemic candidiasis and comprises hybridising DNA released from lysed Candida cells in a blood sample with a probe specific for the ITS2 region. Probes derived from this region can be used for detecting pathogenic candida spp. such as C. tropicalis, C. glabrata, C. krusei, C. parapsilosis or C. albicans in immunocompromised hosts. One Candida cell per microlitre of blood can be detected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Diagnosis of systemic candidiasis by hybridisation assay - using probes specific for new or known Candida DNA sequences.
           Diagnosis of systemic candidiasis by hybridisation assay - using probes specific for new or known Candida DNA sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                          Query Match 0.8%; Score 14.2; DB 1; Length 20; Best Local Similarity 84.2%; Pred. No. 8.7e+02; Matches 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Morrison CJ;
                                                                                                                                                                                                                                                                                         Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lott TJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Candida albicans ITS2 rDNA PCR primer 1.
                                                                                                                                                                                                                                                                                                                                                                                                    1549 CITCGGICTICGICGAIGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Col 6; 11pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zakroff S,
                                                                    Example 1; Col 6; 11pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCGTTCTTCATCGATGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95US-00429520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93US-00065845
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT89976 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (USGO ) US GOVERNMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lasker B, Reiss E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-007977/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
Candida albicans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-MAR-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT89976
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0.8%; Score 14.2; DB 1; Length 20;

Seguence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match

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Gaps

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This antisense oligonucleotide is targeted to a nucleic acid sequence in the IB (immediate early) 2 region of the cytomegalovirus (GWV) genome and is able to inhibit CWV replication. Optionally the oligonucleotide include at least one 2'-(2-methoxyethoxy) sugar modification or phosphorothicate internucleotide linkages. The oligonucleotides (AAX17861 -X17924) are also used to inhibit CWV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially to treat or prevent CWV infections, particularly retinitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonuclectides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.
                          Gaps

    .20
    /*tag= a
    /note= "contains phosphorothioate internucleotide

                                                                                                                                                                                                                                                             Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification; phosphorothioate; infection; retinitis; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= b
/note= "all C bases are 5'-methyl-cytosine'
                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -methoxyethoxy sugar moieties"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sugar moieties"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chapman
                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= b
/note= "2'-methoxyethoxy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Anderson KP,
                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                     1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                      Anti-CMV oligonucleotide #15104.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 7; Page 32; 99pp; English.
                                                                                 crecerretrearests 20
                                                                                                                                                      BP.
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             84.2%;
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                                                                                                                                                                                                          11-MAY-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                     linkages"
                           16; Conservative
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/*tag= 1
                                                                                                                                                      AAX17950 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Draper KG, Kisner DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-568330/48.
                                                                                                                                                                                                                                                                                                                                    Human herpesvirus 5.
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Best Local Similarity
              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9845314-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-OCT-1998
                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                AAX17950;
                                                                                                                            RESULT 974
                           Matches
                                                                                                                                         AAX17950,
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P-PSDB; AAY14610.
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                                                                    Homo sapiens
                                                                                       WO9934016-A2
                                                                                                                              28-DEC-1998;
                                                                                                                                                29-DEC-1997;
                                                                                                                                                            16-OCT-1998;
                                                                                                          08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-0CT-1999
                                         primer; ss.
                                                           Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                  Vider B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 977
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA polymerase of cytomegalovirus (CWV) and are able to inhibit CWV replication. Optionally the oligonucleotides include at least one 2'-(2-methoxyethoxy) sugar modification or phosphorothioate internucleotide linkages. The oligonucleotides are used to inhibit CWV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially to treat or prevent CWV infections, particularly retinitis
                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.
 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                  Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification; phosphorothioate; infection; retinitis; ss.
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 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
 3;
                                                                                                                                                                                                                                                                                                                                         Chapman S;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                         Kisner DL, Anderson KP,
                   131 GGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 7; Page 30; 99pp; English.
                                                                                                                                                Anti-CMV oligonucleotide #5476
                                     GCAAGAAGAGGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAAGAAGAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ18075 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                               98WO-US006895
                                                                                                                                                                                                                                                                                                 97US-00838715
                                                                                    AAX17890 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MAP 5 gene specific primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-OCT-1999 (first entry)
                                                                                                                            11-MAY-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
Conservative
                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                           WEI; 1998-568330/48.
                                                                                                                                                                                                                    Human herpesvirus 5.
                                                                                                                                                                                                                                                                              07-APR-1998;
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                                                                                                                                                                                                                                                           15-OCT-1998
16;
                                                                                                                                                                                                                                                                                                                                        Draper KG,
                                                                                                                                                                                                         Synthetic
                                                                                                         AAX17890;
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                                      20
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                                                                   RESULT 975
Matches
                                                                           AAZ18075
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cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the pattern of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is transformed. They can be used for detecting a selected genetic defect in a individual, e.g. a fetus. They can also be used for determining the effect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction correct family. Sequences AAZI7803-Z13432 repersent primers that can be used the RT-PCR reactions to determine the pattern of gene expression. The
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Genetic proximity, gene expression, cell characterisation; homeobox gene; genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR; kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
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protein phosphatase genes, P450 enzyme genes, steroid receptor
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell the pattern cell; (b) determining in the first cell and the second cell the pattern of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its constitute, whether it carries a genetic defect, or whether it is transformed. They can be used for determining the confidence of they can be used for determining the confining cells capable of expressing an homeobox related desired containing cells capable of expressing an homeobox related desired containing cells capable of expressing an homeobox related desired containing cells capable of expressing an homeobox related desired containing the pattern of gene expression in a selected contained containing the pattern of gene expression in a selected contained containing the pattern of gene expression in a selected contained from a selected from a set of homeobox genes, kinase genes, containing cells capable of expression and selected containing cells capable of containing the pattern of gene expression. The containing cells capable of containing cells capable contained the pattern of gene expression. The containing cells capable contained from a set of homeobox genes, kinase genes, containing cells capable containing cells capable contained containing cells capable containing cells capable containing cells capable cells capable containing cells capable cells ca
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                                                                                                                                                                                                                                                                                                                                                                                             The invention provides a new method for identifying and characterising
                                                                                                                                                                                                                                                                                                   Identifying and characterizing cells by comparing the pattern of gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein phosphatase genes, P450 enzyme genes, steroid receptor superfamily genes or cadherin superfamily genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.2; DB 1; Length 20; 14.2%; Pred. No. 8.7e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene family can be selected from a set of homeobox genes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Serine threonine kinase gene specific primer 245.
                                                                                                                                                                                                                                                                                                                         expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 47; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         971 TACACCGAGACCTCAAGCC 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 TCCACCGCGACCTGAAGCC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ18198 standard; DNA; 20 BP
                                                                        98WO-IL000625
                                                                                                             97IL-00122793
                                                                                                                             98IL-00126627
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                            WPI; 1999-419113/35.
P-PSDB; AAY14728.
                                                                                                                                                                    (GENE-) GENENA LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 16; Conser
WO9934016-A2
                                                                        28-DEC-1998;
                                                                                                                             16-OCT-1998;
                                   08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                         Vider B;
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Homo sapiens WO9934016-A2

primer; ss. Synthetic

à

08-JUL-1999

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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the second cell; (c) calculating a comparity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its cansformed. They can be used for detecting a selected genetic defect in a individual, e.g. a fetus. They can also be used for determining the effect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction property. The method uses reverse transcriptase polymerase chain reaction cylls for determining the pattern of gene expression in a selected cyll in the RT-PCR reactions to determine the pattern of gene expression. The gene family, can be selected from a set of homeobox genes, kinase genes, parcel and the pattern of gene expression. The property is the contract of the pattern of the contract of the contrac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Internal transcribed spacer 2; ITS2; probe; Aspergillus flavus; A. niger; A. terreus; A. nidulans; Rusarium solani; F. moniliforme; Mucor rouxii; M. racemosus; M. plumbeus; M. indicus; A. fumigatus; M. microsus; M. oricinilloides f. circinelloides; Rhizopus oryzae; R. microsporus; K. circinelloides; Rhizomucor pusillus; Absidia corymbifers; Cunninghamella elegans; Pseudallesheria boydii; Scedosporium apiospermum; Penicillium notatum; Sporothrix schenkii; filamentous fungus; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein phosphatase genes, P450 enzyme genes, steroid receptor superfamily genes or cadherin superfamily genes
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primer ITS3 for ITS2 region and adjacent regions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 4; Page 47; 102pp; English.
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98WO-IL000625.
                                                                         97IL-00122793.
98IL-00126627.
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P-PSDB; AAY14732.
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                                                                                                                                                                                                       (GENE-) GENENA LTD
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RESULT
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                                                                                                                                                                                         PCR primers AAV70875-76 and AAV83709 were used to amplify internal transcribed spacer 2 (ITS2) and adjacent regions of various filamentous tungi. Probes can be derived from the amplified sequence (see AAV70845-73) which are species-specific, and can be used for identifying a species selected from Aspergillus flavus, A. fumigatus, A. niger, A. terreus, A. nidulans, Pusarium solani, F. moniliforme, Mucor rouxii, M. racemosus, M. plumbous, M. indicus, M. circinilloides f. circinelloides finizopus oryzae, R. microsporus, R. circinals, R. stolonifer, Rhizomucor pusillus, Absidia corymbifera, Cunninghamella elegans, Pseudallesheria boydii (teleomorph of Scedosporium apiospermum), Penicillium notatum, or Sporothrix schenkii. The probes can be used for differentiating filamentous fungal species from each other and from other medically
                                                                                                                   New nucleic acid probes for filamentous fungi - for detecting e.g. Aspergillus, Fusarium, Mucor, Rhizopus, Rhizomucor, Absidia, Cunninghamella, Pseudoallescheria boydii, Penicillium and Sporothrix
                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR primer 2S used to amplify DNA encoding a thrombopoietin protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cat; thrombopoietin; growth; growth differentiation; megakaryocyte;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New gene and protein having of cat thrombopoietin activity - for
                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                           Choi JS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (NISK ) NIPPON SEIBUTSU KAGAKU KENKYUSHO ZH.
                                                      USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                           Morrison CJ, Reiss E, Aidorevich L,
                                                                                                                                                                                                                                                                                                                                                                                                                1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                         Example 1; Page 8; 45pp; English.
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           98WO-US008926
                                97US-0045400P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX26351 standard; DNA; 20
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(first entry)
                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 84.2'
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                                                                                               WPI; 1999-034737/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primer; ss.
                                                                                                                                                                                                                                                                                                                            important fungi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JP11056368-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-AUG-1997;
           01-MAY-1998;
                                02-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Felis catus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-AUG-2003
25-MAY-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX26351;
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                                                                                                                                                      species
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                                                                                                                        The present sequence represents a PCR primer used to amplify nucleic acid encoding a cat protein having thrombopoietin activity. The protein promotes the growth and the growth differentiation of megakaryocytes. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vaccine; eye disease; conventional trachoma; nonendemic trachoma; paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis; nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer; bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
promoting the growth and the growth differentiation of a megakaryocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                 Score 14.2; DB 1; Length 20; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 1 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genome sequence of Chlamydia trachomatis.
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                                                                        Example 1; Page 4; 13pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1626 AGGCCCCAGCAGCAGCGG 1644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 AGTCCACAGCAGCAGCAG 1
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97FR-00016034.
98US-0107077P.
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                                                                                                                                                                                                                                                                                                                                                                                                   84.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
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04-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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Tue Nov

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Vaccine; eye disease; conventional trachoma; nonendemic trachoma; paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis; nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer; bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vaccine, eye disease, conventional trachoma, nonendemic trachoma, paratrachoma, inclusion conjunctivitis, genital disease, perihepatitis, nongonococcal uretritis, epidymitis, cervicitis, salpingitis, PCR primer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primers AA201426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAX36754-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal uretritis, epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis, pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The polypeptides of the invention may be of use in treating these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.2; DB 1; Length 20;
34.2%; Pred. No. 8.7e+02;
Ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                             PCR primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 7 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 1642; 1755pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97FR-00016034.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84.2%;
  AAZ03873 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ04109 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16; Conservative
                                                                                                                                                                                                                                                                                                    Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-371125/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                            409928475-A2
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                                                                                     07-0CT-1999
                                                                                                                                                                                                                                                                                                                                                                                        10-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Griffais R;
                                                                                                                                                                                                                                                                                 Synthetic.
                                              AAZ03873;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ04109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                           paratrachoma, inclusion conjunctivitis, genital disease, perihepatitis, nongonococcal uretritis, epidymitis, cervicitis, salpingitis, PCR primer, bartholinitis, pneumopathy; venereal lymphogranulomatosis, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCR primers AAZ01426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAX36734-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal uretritis, peneumopathy in breast feeding infants; and venereal lymphogranulomatosis. The polypeptides of the invention may be of use in treating these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                          conventional trachoma; nonendemic trachoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
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                                                                                                                                                                                                                                                                                                                                                                  PCR primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
rative 0; Mismatches 3; Indels
Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 1742; 1755pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1477 CGGATCCACAAACTTCCTG 1495
                                                                                        535 AGCCCCATCTTTGACAAGC 553
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                                                                                                                             AGCGTCATCTTTGAGAAGC 1
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      0.88;
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                          84.2%;
                                                                                                                                                                                                                                       AAZ05087 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                        (first entry)
Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                          Vaccine; eye disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-371125/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
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04-NOV-1998;
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Synthetic.

AAZ05087;

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RESULT 984

AAZ05087

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Gaps

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Query Match

Matches

RESULT 985

AAZ03873

diseases

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This primer was used to amplify a region of the 5.85 rRNA, the Internal Transcribed Spacer or ITS sequence. This region is highly conserved between species. The Internal Transcribed Spacer (ITS) sequences can be isolated from the ribosomal RNA gene region of fungal pathogens, such as Pyrenophora tritici-repentis. The ITS can then be probed for by a sequence with at least 10 contiguous mucleotides in homology with the ITS. This provides a method four detecting fungal pathogens of crops, such as wheat and maize, the sensitivity of this method allows differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This primer was used to amplify a region of the 5.8S rRNA, the Internal Transcribed Spacer or ITS sequence. This region is highly conserved between species. The Internal Transcribed Spacer (ITS) sequences can be isolated from the ribosomal RNA gene region of fungal pathogens, such as Pyrenophora tritici-repentis. The ITS can then be probed for by a sequence with at least 10 contiguous nucleotides in homology with the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ribosomal RNA; fungal pathogen; PCR; crop protection; ss.
                                                                                                                         New internal transcribed spacer DNA from fungal pathogens, used as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New internal transcribed spacer DNA from fungal pathogens, used as sources of primers and probes for pathogen detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels
                                                                                                                                              sources of primers and probes for pathogen detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
(NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
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(NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
                                                                                                                                                                                                                                                                                                                                                                                              between members of the species or genus
                                                                                                                                                                                       Example 6; Page 18; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             internal transcribed spacer; ITS; primer; detection; plant disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 6; Page 18; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1549 CTTCGGTCTTCGTCGATGC 1567
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hes 16; Conservative
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                                                                             WPI; 1999-527487/44.
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                                         Beck JJ;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR; primer; detection; plant disease; crop protection; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the polypeptides of the invention may be of use in treating these
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bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
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Pred. No. 8.7e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                          Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 1661; 1755pp; English.
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97FR-00016034.
98US-0107077P.
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Local Similarity 84.2%;
Les 16; Conservative
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                                                            Chlamydia trachomatis.
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                                                                                                     W09928475-A2
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                                                                                                                                              10-JUN-1999
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Query Match

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AAX23562;
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ITS. This provides a method for detecting fungal pathogens of crops, such as wheat and maize, the sensitivity of this method allows differentiation
                                                                                                                                                                                                                                                                         PCR primer tprb; tpr1; TPR; tetratricopeptide repeat-containing protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Polypeptides comprising novel tetratricopeptide repeat containing genes.
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                                                               0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                     PCR primer tprb for amplification of a tpr1 fragment.
                                           Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
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          as wheat and maize, the sensitivity of t
between members of the species or genus
                                                                                                          1549 CTTCGGTCTTCGTCGATGC 1567
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                                                                                                                                                                                    AAX89549 standard; cDNA; 20 BP
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                                                                                                                                                                                                                                                                                                                                                                                                         96US-0020204P
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                                                                                                                                                                                                                                                                                                                                                                                                                             GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                              12-OCT-1999 (first entry)
                                                              Query Match 0.8'
Best Local Similarity 84.2'
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Murthy AE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-457606/38
                                                                                                                                                                                                                                                                                                                                                                                    19-JUN-1997;
                                                                                                                                                                                                                                                                                                         Synthetic.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                         20-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gusella JF,
                                                                                                                                                                                                                                                                                                                                          US5935851-A
                                                                                                                                                                                                                                                                                                                                                              10-AUG-1999
                                                                                                                                                                                                           AAX89549;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                RESULT 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX23562,
                                                                                                                                                                            AAX89549
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This invention describes a novel composition comprising a number of sensor arrays, where each array comprises a unique probe oligonucleotide, which is the reverse complement of part of a unique trarget of the reverse complement of part of a unique trarget of included the compositions form a method for characterizing a sample of target deletion oligonucleotides with the probe oligonucleotides of the sensor arrays. Such oligonucleotides and their targets are represented in AAX3548-X23709. Oligonucleotides characterized by the method form pharmaceutical compositions that are useful for modulating cellular adhesion or proliferation, and being active against a eukaryotic pathogen, a human immunodeficiency virus (HIV), or a non-human retrovirus, including influenza virus, Epstein-Barr virus, Respiratory Syncytial Virus or cytomegalovirus (GWV). The compositions enable characterization of deletion sequence oligonucleotides having related, but different nucleobase sequences, and quantification of different species of deletion sequence ("trarget") oligonucleotides in a mixture.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New compositions comprising sensor arrays made up of unique probe oligonucleotides - useful for characterizing a sample of target deletion oligonucleotides.
                                                                                                                                 Deletion sequence oligomucleotide; sensor array; eukaryotic pathogen; probe; cellular adhesion modulator; cellular proliferation modulator; human retrovirus; human immunodeficiency virus; non-human retrovirus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 0 A; 5 C; 5 G; 10 T; 0 U; 0 Other;
                                                                      Deletion sequence oligonucleotide 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 94; 163pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 CGGATGAAGAAGATCAAAC 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGCAAGAAGAAGAGCAAAC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98WO-US018084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-00923771.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX96453 standard; DNA; 20
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-SEP-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Srivatsa GS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-205198/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                       HIV; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                               WO9911820-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-SEP-1997;
   18-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-MAR-1999
                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX96453;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
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(REGC ) UNIV CALIFORNIA
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                                                                                              WPI; 1999-153818/13
                                                                     Elie CM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Neospora caninum.
            30-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9947927-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ22586;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                   Lott TJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ22586
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                                                                                                                                                                                                                                                                                                                                                                                                                AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae (see AAX91990). C. pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyagitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAX34584- AAX35879) can be used in immunogenic compositions as vaccines. Vectors containing C. pneumoniae nucleotides sequences can also be used as immunogenic compositions,
                                    Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; neutralising epitope; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Internal transcribed spacer region 2; ITS2; probe; Candida detection; infection; diagnosis; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            especially where the vector directs the expression of a neutralising epitope of C. pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02;
            primer used to amplify an ORF of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Primer for Candida Internal transcribed spacer region 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                            sequence of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                        Page 1827; Disclosure; 1912pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  291 TCGTTCTGCACGGGCCCA 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 TCGTTCTGCACGGGCGACA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX27102 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-US015840.
                                                                                                                                                                                                  98WO-IB001890
                                                                                                                                                                                                                               97FR-00014673
                                                                                                                                                                                                                                            98US-0107078P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 16; Conservative
                                                                                                            Chlamydophila pneumoniae
                                                                                                                                                                                                                                                                                                                               WPI; 1999-357842/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                       (GEST ) GENSET
                                                                                                                                          WO9927105-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JUL-1998;
                                                                                                                                                                                                  20-NOV-1998;
                                                                                                                                                                                                                               21-NOV-1997;
                                                                                                                                                                                                                                            04-NOV-1998;
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                                                                                                                                                                       03-JUN-1999
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                                                                                                                                                                                                                                                                                                  Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Candida sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX27102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 992
            PCR
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This sequence is a primer for a Candida internal transcribed spacer region 2 (ITS2) sequence. The invention relates to a nucleic acid probe for a Candida species that selectively hybridises with a nucleic acid molecule encoding a portion of the ITS2, or a complementary sequence of Candida species selected from Candida guilliermondii, C. haemulonii, C. kefyr, C. lambica, C. lusitaniae, C. norvegensis, C. norvegica, C. rugosa, C. utilis, C. vismanathii, C. zeylanoides, C. dubliniensis, and C. pelliculosa. The nucleic probes can be used to detect, identify and distinguish or differentiate between Candida species in a sample or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        specimen with high sensitivity and specificity. The probes can be used to detect the presence of Candida in the sample, diagnose infection with the disease, quantify the amount of Candida in the sample, or monitor the progress of therapies used to treat the infection. They can also be used to study the organisms and related diseases and to guide therapies and treatments for the diseases
                                                                                                                                                                                                                                                                                                                       New nucleic acid probes for Candida species - comprises a sequence which hybridises with a nucleic acid molecule encoding a portion of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Internal transcribed region; ITS1; nuclear small subunit; nss; vaccine; horse; equine protozoal myeloencephalitis; EPM; diagnosis; therapeutic agent; prophylactic agent; parasite; cyst; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14.2; DB 1; Length 20; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                           Reiss E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primer #2 for amplification of ITS1.
                                                                           (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                           internal transcribed spacer 2 region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 12; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                           Morrison CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Barr BC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19 CTGCGTTCTTCATCGATGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%;
97US-00903446.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-DEC-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
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pCR primers AAZ22885-Z22586 are used to amplify the internal transcribed spacer region (ITS1) of the nuclear small subunit (mss) of Neospora caninum isolates (CNH and BPAR1-AAZ2284). The invention relates to a biologically pure culture of equine Neospora, and the PCR product is used in the identification of the culture. Immunogens (optionally expressed in the identification of the culture. Immunogens (optionally expressed in the identification of Neospora are used in vaccines for the treatment or prevention of Neospora are used in vaccines for animals. Neospora is a causative agent of equine protozoal myeloencephalitis (EPM). Detection of Neospora specific antigens, antibodies or nucleic acid (by usual immunosasy or hybridization tests) is used to diagnose infection. Antibodies specific for equine Neospora are used for diagnose infection. Antibodies specific for equine Neospora are used for diagnose infection. Antibodies specific for equine Neospora allow differentiation between equine protozoal myeloencephalitis caused to by Neospora and Sarcocystis neurona. These pathogens require different treatments and treatment of Neospora is only effective if applied before the parasite has formed cysts. The vaccines also prevent shedding of cocysts by animals known to be infected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1; JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe; rat; hyperproliferative; stress-activated protein kinase; p54; SAP; ss.
Biologically pure culture of equine Neospora, used as source of vaccines and diagnostic reagents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.2; DB 1; Length 20;
34.2%; Pred. No. 8.7e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rat JNK1-specific oligo ISIS No: 21867.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1549 CTTCGGTCTTCGTCGATGC 1567
                                                        Example 3; Page 35; 47pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Crecerricarcearic 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX29421 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 84.2*
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
Rattus norvegicus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9909214-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX29421/
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Gaps

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3; Indels

0; Mismatches

Local Similarity 84.2%;

Query Match

16; Conservative

Matches

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1424 GGATCTCCGCAGAGGATGC 1442

0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02;

Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

modulate the expression of Jun N-terminal kinase (JNK) proteins. The oligonucleotides specifically hybridize to a nucleic acid encoding a JNK1, JNK2 or JNK3 protein, and which modulate expression of these proteins. The oligonucleotides are useful for modulating JNK protein expression and cell cycle progression in cultured cells or animal cells. The oligonucleotides are also useful for modulating the phosphorylation of a protein that has been phosphorylated by a JNK protein, and the expression of a cellular protein that promotes one or more metastatic events. The oligonucleotides also form pharmaceutical compositions for treating animals with a hyperproliferative disease, and for inhibiting tumor growth in an animal. The invention also provides sequences that caspecifically hybridise to nucleic acids encoding rat stress activated protein kinase (SAP) or p54, a homologue of human JNK protein

invention relates to antisense oligonucleotides that detect and

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New antisense compounds targeting nucleic acids encoding human PI3 kinase pI10 delta useful for treating a disease or condition associated with PI3 kinase pI10 delta expression, e.g. rheumatoid arthritis, asthma.
                                                                                                                                                                                                                                                                                                               /mod_base= OTHER
/note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides"
16. .20
                                                                                                                                                                                                                                                                                                                                                                           /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                               Phosphatidyl inositol 3 kinase; PI3K; antisense oligonucleotide; p110;
                                                                                                                                                                         catalytic subunit; treatment; rheumatoid arthritis; asthma; research; diagnostic; infection; inflammation; tumour formation; inhibitor; ss.
                                                                                                                                                                                                                                                                *tag= a
'note= "Phosphorothioate internucleoside linkage'
                                                                                                                                     PI3K antisense inhibitor oligonucleotide ISIS# 32141.
                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                    /*tag= c
/mod base= OTHER
GGATCTCCGTAGACGAAGC 2
                                                              AAA13128 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-00357070.
                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                   '*tag= b
                                                                                                                                                                                                                                                    L. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-282691/24.
                                                                                                                                                                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-JUL-1999;
                                                                                                               17-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                     US6046049-A.
                                                                                                                                                                                                                                                                                                                                                                                                                              04-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Monia BP,
                                                                                                                                                                                                                Synthetic.
                                                                                      AAA13128;
                                      RESULT 995
                                                   AAA13128,
                                                                  셤
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New antisense oligonucleotides that detect and modulate the expression of

Gaarde WA;

Nero PS,

Dean N, Monia BP,

Mckay R,

WPI; 1999-181060/15.

(ISIS-) ISIS PHARM INC.

97US-00910629

13-AUG-1997;

Jun N-terminal kinase proteins - useful for treating hyperproliferative diseases and inhibiting tumor growth in animals, and for modulating protein phosphorylation by these proteins.

Example 7; Page 114; 190pp; English

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Gaps

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Length 20; 3; Indels

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human origin. The collectin can be used as an antibacterial and antiviral agent and for screening potential drug molecules. The new collectin can be produced by standard recombinant methodology. Sequences AAA07708-11 represents PCR primers for cap site sequencing of human collectin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence is that of the forward primer used in the real-time quantitative PCR amplification of cancer specific gene Pro115 (see AAZ95004 and AAZ95005). Overexpression of Pro115 was found in 3 of 4 primary prostate cancer samples examined, indicative of it being a diagnostic marker for prostate cancer. The invention provides ESTs and tall-length contigs for cSGs (see AAZ94998-295017). The CSGs, polypeptides encoded by them, and antibodies that specifically bind CSG are used in claimed methods for detecting, diagnosing, monitoring,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Diagnosing, staging and monitoring the presence and metastases of prostate cancer especially useful for treating prostate cancer comprises measuring changes in cancer specific gene levels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Prostate cancer; cancer specific gene; CSG; expressed sequence tag; EST; diagnosis; monitoring; staging; imaging; therapy; metastasis; marker; human; Prol15; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Prostate cancer diagnostic marker Prol15 forward PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                              Sequence 20 BP; 3 A; 8 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                  Score 14.2; DB 1;
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         imaging and treating prostate cancer
                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cafferkey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2; Page 27; 74pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1600 GACACCGAGTTCTAAGCCA 1618
                                                                                                                                                                                                         595 GGCTTTGGGAAACTGGAGA 613
                                                                                                                                                                                                                                            19 GGATTAGGGAAACTGAAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19 GACCCTGAGTTCAAAGCCA 1
                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                  0.8%;
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                                                                                                                       Ouery Match
Best Local Similarity 84.29
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                       AAZ95024 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Salceda S, Recipon H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DIAD-) DIADEXUS LLC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-339531/29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                              15-AUG-2000
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                                                                                                                                                                                                                                                                                                                                                                           AAZ95024;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                                                                                                                    RESULT 997
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Matches
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                                              This sequence represents a phosphatidyl inositol 3 kinase (PI3K)
targeting antisense oligonucleotide. Phosphatidyl inositol 3 kinases act
as downstream effectors of hormone and growth factor receptors, and have
been implicated in growth factor mediated cell transformation, and
mitogenesis, protein trafficking, cell survival and proliferation, and
mitogenesis, protein trafficking, cell survival and proliferation, and
cell many other cellular activities. PI3K is a heterodimer, consisting of a
llokb catalytic subunit (pilo), and an 85kD regulatory subunit (p85). The
invention relates to antisense oligonuclectides which target the pilo
cell many of PI3K. The antisense oligonuclectides may be used to treat
with various regions of the PI3K mRNA sequence, and inhibit the
cexpression of PI3K. The antisense oligonuclectides may be used to treat
an animal, particularly human, suspected of having or being prone to a
disease or condition associated with the expression of PI3K. The
modulation (preferably inhibition) of the expression of PI3K. The
modulation (preferably inhibition) of the expression of PI3K. The
confidence associated with compositions and formulations, in the preparation of
this for detecting the level of PI3K in a sample, and as prophylaxis,
cell to prevent or delay infection, inflammation or tumour formation.
Cell confidence and to elucidate the function of particular genes, and
confidence the functions of various members of a biological
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New collectin of human origin having antibacterial and antiviral activity, and gene encoding it useful for production of transgenic animals and of antibodies for screening potential drug molecules.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Collectin; human; antibacterial; antiviral; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human collectin sequencing primer TGP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 4; Page 36; 106pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1231 CAGCTACACTTCATCTTCC 1249
                     Claim 16; Col 41; 35pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 CTGCTAGACTTCAGCTTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA07709 standard; DNA; 20 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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nes 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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Gaps

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RESULT 999

AAZ72227

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monoclonal antibodies directed against TAG-72, designated colon cancer (CC) antibodies. The Cantibodies are produced from the rearrangement of WilaphaTAG (AAZ40711). The antibodies are produced from the rearrangement of WilaphaTAG (AAZ40701). The antibodies are used in the invention which relates to a new anti-tumour associated sialylated glycoprotein antigen (TAG)-72 mouse-human chimeric antibody. The variable region of the antibody has a heavy chain (VM) where VM is encoded by a DNA sequence contibody has a heavy carcinoma targeting through the administration to an animal of an anti-TAG-72 mouse-human chimeric antibody produced by specific cell lines. The antibody or a fragment are conjugated to an imaging marker or therapeutic agent, in a pharmaceutically acceptable, contoxic, sterile carrier. The chimeric antibody binds to TAG-72 which is found on certain human tumour cells. The tissue regions containing the therapeutic agents. The method is useful for in vivo diagnosis and the therapeutic agents. The method is useful for in vivo diagnosis and treatment of cancer by administering to an animal an effective amount of a composition for the in situ detection of carcinoma lesions. The method is useful for intraoperative therapy, consisting of locating the position of a tumour thumour through the administration of the antibody, followed by
                                                                                                                                            VHalphaTAG; anti-tumour associated sialylated glycoprotein antigen;
TAG-72; variable region, heavy chain; carcinoma; detect; tumour; ss;
mouse-human chimeric antibody; therapeutic agent; intraoperative therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New mouse-human chimeric antibody, useful for in vivo diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anderson WHK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels
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                                                                                                         Primer for sequencing antibody CC92 heavy chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kaplan DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Schlom J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example, Col 34; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                        88US-00259943.
88US-00261942.
89US-00424362.
93US-00040687.
AAZ40718 standard; DNA; 20 BP
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                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gourlie BB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-038240/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DOWC ) DOW CHEM CO.
                                                                       21-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                         24-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                          19-OCT-1988;
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19-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAR-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mezes PS,
Rixon MW;
                                                                                                                                                                                                                                        Synthetic.
                                    AAZ40718;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                        primer.
                                                                                                                                                                                                                                                              Mus sp.
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AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nuclectide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies the human genome and in complex association studies and haplotyping studies. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents acting methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and researt invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                       Human biallelic marker upstream amplification primer SEQ ID NO:6583.
                                                                                                                                        Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer; amplification; single nucleotide polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chumakov 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 9; Page 1634; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       807 CATTATCCACACGGAGAAG 825
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AAZ72227 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                           99WO-IB000822.
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98US-0109732P.
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                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cohen D, Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          map of the human genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-013267/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GEST ) GENSET
                                                                                                                                                                                                                   diagnosis; ss
                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                     WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                           21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                             21-APR-1998;
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                                                                       10-SEP-2001
                                                                                                                                                                                                                                                                                                                        28-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA29697;
                                    AAZ72227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA29697/
                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EXXXE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
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; 0

Gaps

; 0

1293 GTCCAACGAGGAGTTCAAG 1311

16; Conservative

Best Local Similarity

Matches

à 엄

20 GTACAATGAGAAGTTCAAG 2

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Japanese citrus viroid 2 gene.
                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-349294/30.
                                                                                                                                                                                                                               (DOWC ) DOW CHEM CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              citrus viroid-I-LSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-492947/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JP2000166567-A.
                                                                        31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-DEC-1998;
                                                                                                                           19-OCT-1988;
                                                                                                                                                    24-0CT-1988;
19-0CT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-DEC-1998;
                        18-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-JUN-2000
                                                                                                                                                                                                                                                                                                             Rixon MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA72056;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes an antibody (I) produced by one of the following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9880); CH44-4 (ATCC HB98877); CH88-1 (ATCC HB9881); CH88-3 (ATCC HB9877); CH88-4 (ATCC HB9874); CH88-4 (ATCC HB9873); CH84-2 (ATCC HB9879); CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875), capable of binding to tumour-associated sialylated glycoprotein (TAG)-72 with an affinity at cancer, and for the in situ detection of carcinoma lesions and for in vivo therapy. AAA29682 to AAA29744, and AAV90714 to AAY90723, represent sequences used in the exemplification of the present invention
                                                                Chimeric antibody, VHalphaTAG; TAG-72; human; mouse; diagnosis; tumour-associated sialylated glycoprotein antigen; cytostatic; carcinoma; cancer; detection; therapy; primer; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chimeric antibody, VHalphaTAG, TAG-72; human, mouse, diagnosis, tumour-associated sialylated glycoprotein antigen, cytostatic, carcinoma; cancer, detection, therapy, primer, ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel family of chimeric antibodies for treating cancer with high affinities to a high molecular weight tumor-associated sialylated glycoprotein antigen of human origin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gourlie BB, Mezes PS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                        CC92 heavy chain oligonucleotide primer SEQ ID NO:24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VHalphaTAG oligonucleotide primer SEQ ID NO:44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Anderson WHK, Kaplan DA, Schlom J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1293 GTCCAACGAGGAGTTCAAG 1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example; Col 34; 122pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N
                                                                                                                                                                                                                                                                                                                                                                                                           88US-00259943.
88US-00261942.
89US-00424362.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                           93US-00040687.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTACAATGAGAAGTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA29714 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-AUG-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-349294/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (DOWC ) DOW CHEM CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                              19-OCT-1988;
24-OCT-1988;
19-OCT-1989;
                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                              31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                          US6051225-A.
                                                                                                                                                                                                                                                                                                             18-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US6051225-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rixon MW
                                                                                                                                                                                                          Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA22714/0

ID AAA22

AC AAA22

AC AAA22

XX AC AAA22

XX AC AAA22

XX AC AAA22

XX Chim

XW Chim

XW
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The present invention describes an antibody (I) produced by one of the following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9881); CH44-4 (ATCC HB9877); CH88-1 (ATCC HB9881); CH88-3 (ATCC HB9877); CH88-4 (ATCC HB9878); CH88-5 (ATCC HB9878); CH84-2 (ATCC HB9878); CH84-2 (ATCC HB9878); CH84-3 (ATCC HB9878); CH84-4 (ATCC HB9875), capable of binding to tummour-associated sialylated glycoprotein (TAG)-72 with an affainity at least 25% greater than B72.3. (I) can be used for treating and diagnosing cancer, and for the in situ detection of carcinoma lesions and for in vivo therapy. AAA29682 to AAA29744, and AAY90714 to AAY90723, represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel family of chimeric antibodies for treating cancer with high affinities to a high molecular weight tumor-associated sialylated glycoprotein antigen of human origin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Japanese citrus viroid 2; JCVd2; citrus viroid-I-LSS; detection; infection; citrus tree; Citrus medica; reverse transcription-PCR; RT-PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                            Mezes PS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Indels
                                                                                                                                                                                                                                                                                            Schlom J, Gourlie BB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Japanese citrus viroid 2 gene PCR primer CB2-TM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (NORQ ) NORINSUISANSHO KAJU SHIKENBACHO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1293 GTCCAACGAGGAGTTCAAG 1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example; Col 37; 122pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 GTACAATGAGAAGTTCAAG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
93US-00040687.
                                                                    88US-00259943.
88US-00261942.
                                                                                                                                            89US-00424362
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                                                                                                                                                                                                                                                                                            Anderson WHK, Kaplan DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-NOV-2000 (first entry)
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The invention relates to a gene (AAA72051) from Japanese citrus viroid 2 (JCVd2, citrus viroid-I-LSS). The invention also encompasses the CDNA (AAA72052) of this gene, variants of the gene, primers (AAA72053-A72054) and probes specific for the gene, and a method for the detection of the gene. The JCVd2 RNA was isolated from the leaves and bark of infected citrus medica trees. Probes of the invention may be used to detect infection by JCVd2, and therefore may be used to provide viroid free citrus seedlings. Sequences AAA72053-A72057 represent reverse transcription PCR (RI-PCR) primers for the amplification of the JCVd2 gene or it, fragments. Sequences AAA72055 and AAA72056 constitute a
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                      primer set (#2) used in an exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;
                         Example 2; Page 5; 15pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   502 CCTGAGGGCTACCTGGAGA 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
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20 cérchédédécrecredada 2 d

AAC62964 standard; DNA; 20 BP RESULT 1003

JNK antisense oligonucleotide ISIS #21867.

(first entry)

06-FEB-2001

cellular hyperproliferation, Alzheimer's, Parkinson's disease, amylotrophic lateral sclerosis, retinitis, pigmentosa, epilepsy, myocardial infarction, stroke, obstructive jaundice, polycystic kidney, Antisense; gene therapy; JNK2 protein; apoptosis; cancer; diabetes; Jun N-terminal kinase; ss.

Homo sapiens

WO200059549-A1.

WPI; 2000-579293/54

12-OCT-2000,

04-APR-2000; 2000WO-US008880

99US-00287796 07-APR-1999;

(ISIS-) ISIS PHARM INC.

Gaarde WA; Nero PS, Monia BP, Dean NM, Mckay R,

WPI; 2000-638427/61

Novel methods for reducing apoptosis comprising contacting cells with antisense oligonuclectides, useful for treating apoptotic disorders, e.g. cancer

Example 8; Page 150; 160pp; English.

The present invention relates to antisense oligonucleotides (AAC62844-C63000, AAA66093-A96099 and AAA07993) that hybridise specifically to a nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in decrease of JNK2 expression and leading to induction of apoptosis. The present sequence is one such antisense oligonucleotide. The oligonucleotides of the present invention are useful for treating diseases or conditions with reduced apoptosis, e.g. cancer and cellular hyperproliferation. The oligonucleotides may also be used to increase the stimulation of apoptotic proteins, e.g. for treating Alzheimer's or

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Parkinson's disease, amylotrophic lateral sclerosis, retinitis, pigmentosa, epilepsy, myocardial infarction, stroke, obstructive jaundice, polycystic kidney and diabetes. The present sequence may have a
                                                                                        Gaps
                                                                                       ;
0
                                                                 Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                 Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                        PCR primer; fungal infection; pathogen spread; internal transcribed spacer; ITS; ss.
                                                                                                                                                                                                                                     PCR primer ITS2 used for fungal detection.
                                                                                                                                                                                                                                                                                                                                                                                   (NOVS ) NOVARTIS AG. (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH
                                                                                                          1424 GGATCTCCGCAGAGGATGC 1442
                                                                                                                            GGATCTCCGTAGACGAAGC 2
                                                                    0.8%;
                                                                                                                                                                                                                                                                                                                                               28-FEB-2000; 2000WO-EP001625.
                                                                                                                                                                                                                                                                                                                                                                  01-MAR-1999; 99US-00258967
                                                                                                                                                                           AAA94772 standard; DNA; 20
                                                                                                                                                                                                                  (first entry)
                             phosphorothicate backbone
                                                                                       16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                  Beck JJ, Perry CV;
                                                                             Similarity
                                                                                                                                                                                                                                                                                                         WO200052202-A2
                                                                                                                                                                                                                  19-JAN-2001
                                                                                                                                                                                                                                                                                     Unidentified
                                                                                                                                                                                                                                                                                                                            08-SEP-2000.
                                                                                                                            20
                                                                                                                                                                                               AAA94772;
                                                                    Query Match
Best Local S
                                                                                                                                                          RESULT 1004
                                                                                       Matches
                                                                                                                                                                   AAA94772
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Gaps .; 0

ö The present sequence is a PCR primer which can be used for fungal pathogen detection especially Monilinia laxa or M. fructicola. This sequence may be used to amplify DNA isolated from a plant leaf infected with a pathogen via PCR. The resulting PCR product may then be detected via standard methods. Use of the present sequence for detecting fungal pathogens provides a detailed information on the developments and spread of specific pathogen races over extended geographical areas and further provides a method of detection especially suitable for diseases with a long latent phase. The present sequence is derived from fungal Internal Transcribed spacer (ITS) sequence of the ribosomal RNA gene 5.8S Use of an oligonucleotide primer for identification of a fungal pathogen especially Monilinia laxa or M. fructicola, comprises a nucleotide Gaps . 0 0.8%; Score 14.2; DB 1; Length 20; 14.2%; Pred. No. 8.7e+02; ve 0; Mismatches 3; Indels Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other; sequence having defined base pairs. Example 5; Page 12; 22pp; English. 1549 CTTCGGTCTTCGTCGATGC 1567 crecerrerrearcearec 20 84.2%; 16; Conservative Local Similarity Query Match Matches à g

Lander

Ireland JS,

AAA94773

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The present invention is concerned with a number of human single nucleotide polymorphisms (SNPs) which the inventors identified in human genes. These SNPs can be used in disease diagnosis and prediction of an individual's susceptibility to disease, in forensic and paternity testing and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovacular, endocrine and neurological systems, such as coronary artery disease, echizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and genetic analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.2; DB 1; Length 20;
ilarity 84.2%; Pred. No. 8.7e+02;
Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Single nucleotide polymorphism PCR primer #1433.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (WHED ) WHITEHEAD INST BIOMEDICAL RES. (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                       (WHED ) WHITEHEAD INST BIOMEDICAL RES. (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1449 ACATCCATTCTTCCTCAGT 1467
                                                                                                                                                                                                                                                                   Cargill M, Daley
Patil N, Sklar P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ||||||||| || || ||| ||| acatccatacteccteagt 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 8; Fig 5; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAR-2000; 2000WO-US008440.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-0127248P
                                                                                                                    30-MAR-2000; 2000WO-US008440.
                                                                                                                                                                99US-0127248P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
es 16; Conserva
                                                                                                                                                                                                                                                                                                                                WPI; 2000-611722/58.
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                                      WO200058519-A2
                                                                                                                                                                                                                                                                   Altshuler D,
Lipshutz RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-MAR-1999;
Homo sapiens.
                                                                                                                                                                31-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-0CT-2000
                                                                                05-0CT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC72320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1007
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Matches
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à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is a PCR primer which can be used for fungal pathogen detection especially Monilinia laxa or M. fructicola. This sequence may be used to amplify DNA isolated from a plant leaf infected with a pathogen via PCR. The resulting PCR product may then be detected via standard methods. Use of the present sequence for detecting fungal pathogens provides a detailed information on the developments and spread of specific pathogen races over extended geographical areas and further provides a method of detection especially suitable for diseases with a long latent phase. The present sequence is derived from fungal Internal Transcribed spacer (ITS) sequence of the ribosomal RNA gene 5.8S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Use of an oligonucleotide primer for identification of a fungal pathogen especially Monilinia laxa or M. fructicola, comprises a nucleotide sequence having defined base pairs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Single nucleotide polymorphism PCR primer #1427.
                                                                                                                                                                                                                                 PCR primer; fungal infection; pathogen spread; internal transcribed spacer; ITS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (NOVS ) NOVARTIS AG. (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
                                                                                                                                                                                        PCR primer ITS3 used for fungal detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 5; Page 12; 22pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          crecerrericaredaree 1
                                                              AAA94773 standard; DNA; 20 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match
Best Local Similarity 84.2°
Matches 16; Conservative
                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-579293/54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Beck JJ, Perry CV;
                                                                                                                                                                                                                                                                                                                                      WO200052202-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-1999;
                                                                                                                                                                                                                                                                                                Unidentified.
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                         RESULT 1005
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Lander ES;

Ireland JS,

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The present invention is concerned with a number of human single nucleotide polymorphisms (SNPs) which the inventors identified in human genes. These SNPs can be used in disease diagnosis and prediction of an individual's susceptibility to disease, in forensic and paternity testing and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovascular,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and
                                                                           Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and
                                                                                                                                                                                                                                                                                        endocrine and neurological systems, such as coronary artery disease, schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Daley GQ, Ireland JS, Sklar P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Single nucleotide polymorphism PCR primer #1417.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (WHED ) WHITEHEAD INST BIOMEDICAL RES (AFFY-) AFFYMETRIX INC.
Daley GQ,
Sklar P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1449 ACATCCATTCTTCCTCAGT 1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 ACATCCATACTGCCTGAGT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 8; Fig 5; 214pp; English.
                                                                                                                                                            Claim 8; Fig 5; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAR-2000; 2000WO-US008440.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAC72296 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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Patil N, S
                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
 Cargill M,
Patil N, 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-611722/58.
                                               WPI; 2000-611722/58
                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  genetic analysis.
                                                                                                                                genetic analysis.
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Altshuler D,
Lipshutz RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lipshutz RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1008
                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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The present invention is concerned with a number of human single

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The present invention relates to a method for obtaining adult mammalian central nervous system (CNS) derived progenitor cells or adult mammalian CNS-derived stem cells from a cell population containing adult mammalian CNS tissue. The method involves subjecting dissociated mammalian CNS tissue to 1 or more buoyancy-based separation systems. The cells may be used to repair damaged or diseased tissue in mature mammals, particularly neuronal tissue such as retinas. In particular, the method may be used for repopulating a retina of a dystrophic animal with neurons by injecting CNS cells from a healthy donor. The present sequence is a primer used to amplify rat trkB RNA. This was used to assay the responsiveness of CNS stem cells when exposed to retinoic acid and a
nucleotide polymorphisms (SNPs) which the inventors identified in human genes. These SNPs can be used in disease diagnosis and prediction of an individual's susceptibility to disease, in forensic and paternity testing and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovascular, endocrine and neurological systems, such as coronary artery disease, schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Producing adult mammalian central nervous system (CNS)-derived progenitor cells or adult mammalian CNS-derived stem cells from adult mammalian CNS tissue for the treatment of opthalmic disorders.
                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Primer; central nervous system; CNS; buoyancy-based separation; rat;
                                                                                                                                                                                                                                       ..
0
                                                                                                                                                                                                0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Takahashi M;
                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 14.2; DB 1;
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Takahashi J,
                                                                                                                                                                                                                                       0; Mismatches

    primer used to amplify rat trkB RNA.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 5; Page 29; 52pp; English.
                                                                                                                                                                                                                                                                          1449 ACATCCATTCTTCCTCAGT 1467
                                                                                                                                                                                                                                                                                                            20
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                                                                                                                                                                                                                                                                                                                                                                                                     ВР
                                                                                                                                                                                                                                                                                               2 ACATCCATACTGCCTGAGT
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                                                                                                                                                                                                                                                                                                                                                                                                     AAA90638 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                     16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Palmer T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dystrophy; trkB; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-558212/51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                      Best Local Similarity
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24-SEP-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA90638;
                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                  RESULT 1009
                                                                                                                                                                                                                                       Matches
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anti-viral therapy; stereochemical pathway;
                                                                                                                                                                                                                                  'note = "All bases are phosphorothioate"
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/mod_base= OTHER
/note= "Modified with 2'-methoxyethyl"
                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "Modified with 2'-methoxyethyl"
                                                                                                                                                                          Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                       '*tag= c
'label= RNA
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/label= RNA
                                                                                                                                                                                                                      pase=
                                           (first entry)
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                                                                                                                                                                                                       *tag=
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                                                                                                   Phosphorothioate; a
DNA-RNA hybrid; ss.
                                                                       Oligonucleotide #6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
es 16; Conserv
                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                modified base
                                                                                                                                                                                                                                                                                                                                                                                             modified base
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                                           14-SEP-2001
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                                                                                                                                              Synthetic
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Best Local Si
Matches 16;
               AAH46457;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequence is a sequencing primer for nucleic acids encoding Mouse antibody heavy chains CC92VH and B72.3, which can form chimaeric antibody molecules of the invention. The invention concerns chimaeric antibody heavy chains or their chimaeric antibody leave the ability to combine with anti-TAG-72 antibody light chain to form a binding site having an affinity for TAG-72 which is at least 25% greater than that of B72.3 (an antibody known to the prior art). TAG-72 is a human tumour antigen thought to be a mucin glycoprotein. DNA sequences encoding the chimaeric heavy chains are useful for producing antibodies that are useful for cancer treatment, such as in vivo diagnostic assays, in vivo therapy and radioiammunoguided surgery. The antibodies produce significantly fewer side-effects when administered to human patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel DNA sequence encoding chimeric antibody heavy chain or its chimeric antigen-binding fragment, useful for cancer treatment, such as in vivo diagnostic assays, in vivo therapy and radioimmunoguided surgery.
                                                                                                                                                                                                                                              antibody; TAG-72; mucin; chimaeric heavy chain; B72.3; tumour;
radioimmunoguided surgery; sequencing primer; ss; B72.3/CC92 HC.
 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                  Mouse immunoglobulin heavy chain sequencing primer B72.3/CC92 HC.
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0
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Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Schlom J, Kaplan DA;
3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rixon MW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1293 GTCCAACGAGGAGTTCAAG 1311
                            834 CCTTGTCTTTGAGTACCTG 852
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example; Col 34; 120pp; English
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                                                                                                                             AAS03547 standard; DNA; 20 BP.
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88US-00261942.
89US-00424362.
93US-00040687.
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                                                                                                                                                                                       (first entry)
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Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gourlie BB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DOWC ) DOW CHEM CO.
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                                                                                                                                                                                                                                                                                                                      US6207815-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Anderson WHK;
                                                                                                                                                                                                                                                                                                                                                                                                                        24-OCT-1988;
19-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                            07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                         19-OCT-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAR-1993;
                                                                                                                                                                                       29-AUG-2001
                                                                                                                                                                                                                                                                                                                                                 27-MAR-2001
16;
                                                                                                                                                          AAS03547;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mezes PS,
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Best Local S:
Matches 16
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                                                                                                                                                                                                                                                               cancer;
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AAH46457/c
ID AAH4645
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                                                                                                RESULT 1010
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Matches
                                                                                                               AAS03547,
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Cheruvallath ZS;

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                                                                                                                                                                                                                        The present invention relates to a method for preparing phosphorothioate oligonucleotides having at least one nucleoside with a 2' modification. The method comprises phosphitylating the 5'-hydroxyl of a nucleic acid group having at least one nucleoside with a 2' modification in an acetonitrile. The present sequence was used to illustrate the method of the present invention. The method is useful for synthesising sulphurised 2' substituted phosphorothioate oligonucleotides, which may be used in molecular biological research, in applications such as anti-viral therapy, and for determining the stereochemical pathways of certain
Preparing sulfurized 2' substituted phosphorothicate oligonuclectides useful in biological research, comprises phosphitylating the 5'-hydroxyl of a nucleic acid having a nucleoside with a 2' modification.
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 0 A; 6 C; 4 G; 4 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     enzymes which recognise nucleic acids
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                                                                                                                                                      Example 9; Col 6; 7pp; English
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AAH46457 standard; DNA; 20 BP.

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AAH44591;

RESULT 1012 AAH44591

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The present invention describes a method for differentiating between seeds of Cyamopsis tetragonoloba (guar) and Ceratonia siliqua (locust bean) from differences in rDNA extracted from them. The seeds are germinated, DNA extracted and amplified by polymerase chain reaction (PCR) using transcribed spacer) region) and TR3/TR3 (flanking the ITS intervening transcribed spacer) region) and TR3/TR3 (flanking the ITS cagion). The amplicons are then detected. Also described are: (1) the detection of guar gum, individually or mixed with locust bean gum, by corresponding to guar; and (2) extraction of DNA, amplification by PCR and detecting amplicons corresponding to guar; and (2) extraction of DNA from guar gum and/or locust bean gum. The method is used to differentiate between guar and clocust bean seeds (or their derived gums), e.g. to confirm authenticity of guar gum. The gums are used as thickners, gelling agents and stabilisers in foods. The specified primers provide selective
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Differentiating between guar and locust bean seeds, or derived gums, by amplifying specific, characteristic regions of ribosomal DNA.
                                                                                                                    Guar gum; locust bean gum; detection; plant; initiator; amplification;
PCR; Cyamopsis tetragonoloba; Ceratonia siliqua; thickener;
gelling agent; food stabiliser; differentiation; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Domenech Sanchez A, Hernandez Viadel ML;
Rossello Picornell JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.8%; Score 14.2; DB 1; Length 20; Best Local Similarity 84.2%; Pred. No. 8.7e+02; Matches 16; Conservative 0; Mismatches 3; Indels
                                                                     Guar and locust bean seed differentiation PCR primer ITS2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Internal transcribed spacer, ITS, PCR primer ITS2.
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(UYIS-) UNIV LAS ISLAS BALEARES.
(UYVA-) UNIV VALENCIA.
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                      (first entry)
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Alberti Serrano S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYVA-) UNIV VALI
(CARO-) CAROB SA
                                                                                                                                                                                                                                                                                       WO200166794-A1.
                      01-NOV-2001
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                                                                                                                                                                                                                                   Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a method for differentiating between seeds of Cyamopsis tetragonoloba (guar) and Ceratonia siliqua (locust bean) from differences in TDNA extracted from them. The seeds are germinated, DNA extracted and amplified by polymerase chain reaction (PCR) using the rDNA-specific primer pairs ITS5/ITS2 (flanking the ITS2 (intervening transcribed spacer) I region) and ITS3/ITS4 (flanking the ITS2 (intervening transcribed spacer) I region) and ITS3/ITS4 (flanking the ITS2 caregion). The amplicons are then detected. Also described are: (1) the detection of guar gum, individually or mixed with locust bean gum, by extraction of DNA, amplification by PCR and detecting amplicons corresponding to guar; and (2) extraction of DNA from guar gum and/or locust bean gum. The method is used to differentiate between guar and locust bean seeds (or their derived gums), e.g. to confirm authenticity of guar gum. The gums are used as thickeners, gelling agents and stabilisers in foods. The specified primers provide selective identification of the different seeds. The present sequence represents the ITSS PCR primer from the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Differentiating between guar and locust bean seeds, or derived gums, by amplifying specific, characteristic regions of ribosomal DNA.
                                                                                                                                                                                                                                                                                    Guar gum; locust bean gum; detection; plant; initiator; amplification; PCR; Cyamopsis tetragonoloba; Ceratonia siliqua; thickener; gelling agent; food stabiliser; differentiation; PCR primer; ss.
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Rossello Picornell JA;
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84.2%; Pred. No. 8.7e+02;
cive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                     Guar and locust bean seed differentiation PCR primer ITS3.
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UNIV LAS ISLAS BALEARES.
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                                                                          AAH44591 standard; DNA; 20 BP.
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Alberti Serrano S,
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Query Match

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RESULT 1013 AAH44593 ID AAH44593 XX AC AAH44593

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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequence is a PCR primer used to amplify the internal transcribed spacer (ITS) from the 5.8s rDNA gene of wheat fungal pathogens. The ITS DNA sequences are useful for detecting Rhizoctonia cerealis, a fungal pathogen of wheat causing Sharp eyespot, for monitoring disease development in plant population, and for providing detailed information on the development and spread of specific pathogen races over extended in the population and spread of specific pathogen races over extended in the part of the pathogen races over extended in the part of the pathogen races over extended in the part of the pathogen races over extended in the part of the pathogen races over extended in the part of the pathogen races over extended in the part of the pathogen races over extended in the part of the pathogen races over extended in the pathogen races over extend
wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fungal pathogen, particularly Rhizoctonia cerealis, and for monitoring disease development in plant population.
                                                                                                                                                                                                                                                                                                                                                                                                                                            New internal transcribed spacer DNA sequences, useful for identifying
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84.2%; Pred. No. 8.7e+02;
tive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                         (SYGN ) SYNGENTA PARTICIPATIONS AG.
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                                                                                                                                          19-JUL-2001
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                                                Synthetic.
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                                                                                                                                                                                                                                                                                                                                          Beck JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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Matches
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                                                                                                                                                                                                                                                          The sequence is a PCR primer used to amplify the internal transcribed spacer (ITS) from the 5.8s rDNA gene of wheat fungal pathogens. The ITS DNA sequences are useful for detecting Rhizoctonia cerealis, a fungal pathogen of wheat causing Sharp eyegot, for monitoring disease development in plant population, and for providing detailed information on the development and spread of specific pathogen races over extended geographical areas. The DNA sequences are specifically used as primers in PCR-based analysis for the identification of fungal pathotypes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to detecting and identifying fungal pathogenic species in a sample. The method involves hybridizing a nucleic acid of a fungal pathogen possibly present in the sample with at least one oligonucleotide probe, from an Internal Transcribed Spacer (ITS) region. The method is useful for simultaneous detection and differentiation of clinically important fungi in a single assay, particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr, C. krusei, C. glabratea, C. dubliniensis, Aspergillus flavus, A. versicole, A. nidulans, A. fumigatus, C. neoformans and pneumocystis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Detecting and identifying fungal pathogens, especially Candida, cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic acid of the fungal pathogen with a probe from the internal transcribed spacer region of a DNA.
New internal transcribed spacer DNA sequences, useful for identifying fungal pathogen, particularly Rhizoctonia cerealis, and for monitoring disease development in plant population.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Σ̈́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.2; DB 1; Length Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fungal pathogenic; Internal Transcribed Spacer; ITS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rossau R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
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                                                                                                                                                                                    Example 6; Page 16; 35pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 3; Page 49; 59pp; English.
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1549 CTTCGGTCTTCGTCGATGC 1567

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                such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Detecting and identifying fungal pathogens, especially Candida, Cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic acid of the fungal pathogen with a probe from the internal transcribed spacer region of a DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         opportunistic infections in patients with impaired immunity systems, su as organ transplants patients, patients receiving intensive anticancer treatments, diabetics or AIDS patients
carinii. The method is especially useful in the detection of opportunistic infections in patients with impaired immunity systems, sus organ transplants patients, patients receiving intensive anticancer treatments, diabetics or AIDS patients
                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Van Der Weide M;
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                                                                                                                                                                                                                                                                                                                                                                                                                        Universal fungal internal transcribed spacer region primer #5.
                                                                                                                    Length 20;
                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Internal Transcribed Spacer; ITS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rossau R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INNO-) INNOGENETICS NV.
(IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.
                                                                                   Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                  Score 14.2; DB 1;
Pred. No. 8.7e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jannes G,
                                                                                                                                                                                          1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 3; Page 49; 59pp; English.
                                                                                                                                                                                                                             CIGCGIICIICAICGAIGC 20
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                                                                                                                    0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-MAY-2000; 2000WO-EP004714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99EP-00870109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0138621P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fungal pathogenic; Internal opportunistic infection; ss.
                                                                                                                                                                                                                                                                                                                  AAC91162 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                     Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                     AAC91162;
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The invention relates to a method for the detection of an abnormal allele

of the human interferon regulatory factor-1 (IRF-1) gene. The abnormal

allele (AAH46293) is present in PLC/PRF/5 liver cancer cells and contains

a fo A substitution at position 196 of the IRF-1 promoter region

c formal alleles given in AAH46293 and AAH46294). The abnormal allele

confers an insensitivity to the effects of interferon (IFW). In the

confers an insensitivity to the effects of interferon (IFW). In the

confers an insensitivity to the effects of interferon is at position

confers an insensitivity to the effects of interferon is to option

confers an insensitivity to the effects of interferon is to option

confers an insensitivity to the effects of interferon is to optionally be prepared (e.g., by PCR). The invention also discloses the

cuse of IRF-1 gene fragments as probes to detect the A polymorphism. The

method of the invention is used to genotype a patient with hepatitis C

curron (HCV) infection in order to predict whether interferon therapy will

confers the invention of the invention to amplify wild-type and polymorphic

confers an exemplification of the invention to amplify wild-type and polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                              Human, interferon regulatory factor-1; IRF-1; promoter; upstream region; genotyping; polymorphism; hepatitis C virus; HCV infection; interferon therapy efficacy; IFN; RFLP analysis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Detection of abnormal human interferon regulatory factor-1 (IRF-1) gene.
                                                                                                                                                                                                            Human interferon regulatory factor-1 (IRF-1) forward RFLP PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                             restriction fragment length polymorphism; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 4 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1188 GGCCACAGGCCGTCCCTC 1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 6; 8pp; Japanese.
   19 crecerricircarcearec 1
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                                                                                               AAH46289 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99JP-00324975.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99JP-00324975.
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                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            site for RFLP analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-460211/50.
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es 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                         JP2001136973-A.
                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAY-2001.
                                                                                                                                                                          25-SEP-2001
                                                                                                                                      AAH46289;
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Gaps

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0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02; lve 0; Mismatches 3; Indels

84.2%;

Best Local Similarity 84.2 Matches 16; Conservative

Query Match

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Gaps

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Indels

Length 20;

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20-OCT-2000; 2000WO-US029088.
                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                 WPI; 2001-335680/35.
                                                                                                                                                                                         especially cancer
                                                                                 WO200130361-A1
                                          modified base
                                                    modified base
                                                                  modified base
                                  Homo sapiens
                                                                                                 27-OCT-1999;
     25-JUL-2001
                                                                                                            Bennett CF,
                                                                                       03-MAY-2001
                                                                                                                               rejection.
AAF86755;
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16S/23SrRNA spacer region of Pseudomonas putida (see AA169774). The method can be used to detect Pseudomonas bacteria. The present sequence is a PCR primer which was used in an example from the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present invention relates to a method for the detection of the
                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacterium detection; 16S/23SrRNA spacer region; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rRNA gene ITS2 reverse PCR primer, SEQ ID NO:6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 14.2; DB 1; Length Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
Score 14.2; DB 1;
Pred. No. 8.7e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Detection method of Pseudomonas bacteria.
                                                                                                                                                                                                                                                                                                                                                                                        16S/23SrRNA spacer region PCR primer #3.
                                                                                         GAACCIGCICATCAACGAG 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 9; Page 8; 11pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             48 ACCAGCAGTGTGACTGCTG 66
                                                                                                                                        GAACCGGGGCATCAACGAG 1
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                                                                                                                                                                                                                                                       BP
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0.8%;
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                                                                                                                                                                                                                                                    AAI69777 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH73769 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                              (first entry)
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(first entry)
                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 84.2
Matches 16; Conservative
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                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pseudomonas putida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JP2001190279-A.
                                               16;
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08-OCT-2001
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                                                                                                                                                                                                                                                                                                 AA169777;
Query Match
Best Local (
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                                               Matches
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AAI69777/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleotide binding site opener, miscr, and ARF exchange factor) is localised to the plasma membrane and promotes guanine nucleotide exchange on ARF1, ARF3 and ARF6, the latter of which regulates the assembly of the actin cytoskeleton. Through its interaction with ARR6, and in conjunction with protein kinase C, cytohesin-2 functions as a critical link between cell surface receptors and the actin cytoskeleton. The oligonucleotides of the invention are useful for diagnosis, prevention and treatment of conditions associated with cytohesin-2 expression, such as atherosclerosis, allograft rejection and hyperproliferative disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compounds modulating expression of human cytchesin-2 useful for diagnosis, prophylaxis and treatment of diseases associated with expression of cytchesin-2, e.g. cancer, atherosclerosis, allograft
                                                                                                                            mSec7; ARF exchange factor; cytosolic adapter protein; granting quantine nucleotide exchange factor; ADP ribosylation factor; ARF1; ARF3; ARF6; actin cytoskeleton regulation; expression inhibitation; atherosclerosis; allograft rejection; hyperproliferative disorder; cancer; tumour; phosphorothioate; antisense oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE cytosines are 5-methylcytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human cytohesin-2 gene, which inhibit its expression. A series of objective cocides (AAF86697-AAF86776) were designed to target different regions of the human cytohesin-2 RNA, and were analysed for their effect on cytohesin-2 mRNA levels by quantitative real-time PCR. Cytohesin-2 is a member of a small family of cytosolic adapter proteins which function as quantime nucleotide exchange factors for ADP ribosylation factors (ARF9), small monomeric G-proteins which regulate critical vesicular traffic pathways. Cytohesin-2 (also known as PSCD2, ARNO for ARP
                                                                                                         cytohesin-2; PSCD2; ARNO for ARF nucleotide binding site opener;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to antisense oligonucleotides targetted to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (2'-MOE) nucleotides. All
                                                               Human cytohesin-2 antisense oligonucleotide, SEQ ID NO:68.
                                                                                                                                                                                                                                                                                                                                                                                                             note= "Phosphorothicate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "2'-methoxyethyl (2'-MO)
cytosines are 5-methylcytosine
                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
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/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                      mod_base= OTHER
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                       (first entry)
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/*tag=
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Gaps

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Indels

Guignardia citricarpa. Guignardia citricarpa.

Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

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Ribosomal RNA gene; rRNA gene; internal transcribed spacer; ITS; non-pathogenic; citrus blackspot disease; citrus fruit; differentiation; characterisation; detection; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1549 CTTCGGTCTTCGTCGATGC 1567
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAH73770 standard; DNA; 20 BP
                                                                                                                                                                                                    19-JAN-2000; 2000US-0177013P.
                                                                                                                                        19-JAN-2001; 2001WO-US001735
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(first entry)
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Best Local Similarity
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                           WO200153318-A2.
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08-OCT-2001
                                                                                    26-JUL-2001
                                                                                                                                                                                                                                                                                                                       Carroll GC;
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AAH73770/C
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AC AAH73770
AC AAH73770
DT 08-OCT-7
DT 08-OCT-7
XX
XX
XX
RIDOSOUM
XW
RIDOSOUM
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CHATACL
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RIDOSOUM
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The invention relates to oligonucleotide amplification primers and methods for the detection of pathogenic Guignardia citricarpa. Guignardia citricarpa is a fungus which causes citrus blackspot disease, producing progressive black surface lesions on the fruits of most commercial citrus cultivars such as oranges, lemons, limes, and grapefruit. Although this cultivars such as oranges, lemons, limes, and grapefruit. Although this is a cosmetic disease, it causes significant losses to the citrus fruit caffected fruit. However, there is a second, non-pathogenic Guignardia citricarpi, which also infects citrus fruit, but which forms insignificant leak-ons. This non-pathogenic Guignardia species is morphologically almost indistinguishable from the pathogenic Guignardia citricarpa, and both species may be simultaneously present on transcribed spacer (ITS) regions of the ribosomal RNA gene of either the cannot comparate citricarpa (see AAH73768). These regions exhibit significant difficultiant completes may be distinguished from one other. The present sequence two species may be distinguished from one other. The present sequence trepresents a forward PCR primer specific for the rRNA gene ITS region of the non-pathogenic Guignardia citricarpa (see AAH73768). These regions exhibit significant the presents a forward PCR primer specific for the rRNA gene ITS region of the non-pathogenic Guignardia citricarpi. (Updated on 06-AUG-2003 to
                                                                                                                                                                                                                                                                                                                                                                 New differentiating oligonucleotides which hybridizes with a target DNA sequence associated with pathogenic or non-pathogenic species of Guignardia, for differentiating pathogenic from non-pathogenic species.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.2; DB 1; Length 20;
14.2%; Pred. No. 8.7e+02;
ve 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example I; Page 19; 33pp; English
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                                                                                                                                      19-JAN-2000; 2000US-0177013P.
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Best Local Similarity 84.2%;
Matches 16; Conservative
                                                                             19-JAN-2001; 2001WO-US001735.
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                          26-JUL-2001
                                                                                                                                                                                                                                                           Carroll GC;
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qq
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to oligonuclectide amplification primers and methods for the detection of pathogenic Guignardia citricarpa is a fungua which causes citrus blackspot disease. Producing progressive black surface lesions on the fruits of most commercial citrus progressive black surface lesions on the fruits of most commercial citrus cultivars such as oranges, lemons, limes, and grapefruit. Although this coultivars such as oranges, lemons, limes, and grapefruit. Although this coultivars is a cosmetic disease; it causes significant losses to the citrus fruit growing industry, as many countries do not permit the importation of affected fruit. However, there is a second, non-pathogenic Guignardia countricant indistinguishable from the pathogenic Guignardia species which forms insignificant lesions. This non-pathogenic Guignardia species con fruit. The primers of the invention are targetted to the internal cone fruit. The primers of the invention are targetted to the internal cone fruit. The primers of the invention are targetted to the internal cone fruit and citricarpa, and both species may be simultaneously present on transcribed spacer (ITS) regions of the ribosomal RNA gene of either the differences between the two species, and provides a means by which the two species, and provides a means by which the represents a reverse PCR primer which can be used to amplify the rRNA gene ITS regions of both the pathogenic Guignardia citricarpa and the non-pathogenic Os pathogenic Guignardia citricarpi. (Updated on 06-ANG-2003 to correct OS
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                                                                                                                                                                                                                                                                                                                                                                                                                                New differentiating oligonucleotides which hybridizes with a target DNA sequence associated with pathogenic or non-pathogenic species of Guignardia, for differentiating pathogenic from non-pathogenic species.
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84.2%; Pred. No. 8.7e+02;
cive 0; Mismatches 3; Indels
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Gaps

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20-JUN-2000; 2000KR-00033967.

KR2002000043-A.

04-JAN-2002

with

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hyperproliferative disorder; cancer, blood disorder, stroke;
brain injury; neurodegenerative disease; infection; inflammation; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                               Caspase 2; antisense; cytostatic; osteopathic; cerebroprotective; neuroprotective; antilipemic; antiinflammatory; antimicrobial; haematopoietic disorder; bone metabolism disorder; cholesterol disorder;
                                                                            DNA marker for detecting Phytophthora infestans in potato and tomato.
                                                                                                                                                                                                                                                                                                                                                                                                            Human caspase 2 antisense inhibitor oligonucleotide #26.
                                                                                                                                                                                                                     Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                               1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                Disclosure; Fig 1; 9pp; Korean.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= a
/mod_base= m5c,
 20-JUN-2000; 2000KR-00033967.
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                                                                                                                                                                                                                                                            Conservative
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                   (UYKA-) UNIV KANGWON
                                                          WPI; 2002-441747/47.
                                                                                                                                                                                                                                                  Best Local Similarity
Matches 16; Conserv
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                                       Lee YS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                        ABN74847;
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                                       Kim GS,
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OTHER

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The invention relates to a compound 8-50 nucleobases in length targeted to a nucleic acid molecule encoding caspase 2, which specifically hybridises with and inhibits the expression of caspase 2, or specifically thybridises with and inhibits the expression of caspase 2, or specifically hybridises with an least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding caspase 2. The activity of antisense of oligonucleotides of the livention may be described as, cytostatic, osteopathic, cerebroprotective, neuroprotective, antilipemic, antiinflammatory and antimicrobial. The antisense compounds are useful for tracting an animal having a disease or condition associated with caspase 2, such as haematopoietic disorder, bone metabolism disorder, cholesterol disorder, or a hyperproliferative disorder. These compounds of useful as research reagents and diagnostics, to distinguish the between functions of various members of a biological pathway, in the treatment of a disease or disorder which can be treated by modulating the expression of caspase 2, including cancer, blood disorders, stroke, brain injury and neurodegenerative diseases. They may also be used for thouse of caspase 2, including cancer, blood disorders, stroke, brain continuous and continuous and continuous continuous and continuous cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense gene therapy; RAIDD; death domain; caspase recruitment domain; CARD; hyperproliferative disorder; cancer; growth disorder; mouse; metabolic disorder; infection; inflammation; tumour formation; RIP associated ICH-1/CED-3-homologous protein with death domain; receptor interacting protein; antisense oligonucleotide; ss.
                                                     New antisense compounds targeted to nucleic acid molecule encoding caspase 2, useful for treating diseases or conditions associated wicaspase 2, e.g. cancer, blood disorders, stroke, brain injury and neurodegenerative diseases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse RAIDD antisense oligonucleotide #14.
                                                                                                                                                                                                Claim 3; Page 99; 146pp; English.
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WPI; 2002-351998/38.
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Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-OCT-2002
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                                                                                                                                                                                                                                                                                                                          The invention relates to a DNA marker for detecting Phytophthora infestans in potato and tomato, useful for specifically detecting a small amount of Phytophthora infestans DNA and diagnoshing the infection of Phytophthora infestans in potato and tomato at any time. The DNA marker for Phytophthora infestans in potato and tomato is produced by extracting for Phytophthora species, amplifying the internal transcribed spacer (ITS) II region using primers ITS3 (ABN85669) and ITS4 (ABN85669), cloning the amplified products into pGEM-T easy vector, preparing a primer PISP-1 (ABN85670) and linking the primers PISP-1 and ITS3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                wings consisting 2'methoxyethyl (2'-WOE) nucleotides, 15 are 2'deoxynucleotides, backbone linkages are phosphodiester, all cytosines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "Nucleotides 1-5 and 16-20 are five-nucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ative 0; Mismatches 3; Indels
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Novel antisense compound that hybridizes and inhibits nucleic acid

WPI; 2002-583496/62.

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Gaps